LANDSCAPE IMPROVEMENT PLANS FOR:

TCMC PARKING STRUCTURE

4002 VISTA WAY

OCEANSIDE, CA 92056

APN 166-020-3200 AND 166-010-4300

CITY OF OCEANSIDE GENERAL NOTES

1. All construction and installation of landscape items are subject to the City of Oceanside Guidelines and Specifications for Landscape Development (1985, addenda 1997) and the most current City of Oceanside Approved Street Tree List.
2. The Landscape Contractor is responsible for obtaining all permits necessary for installation prior to beginning work. This includes all building and plumbing permits prior to commencing wall construction and irrigation installation, respectively.
3. The contractor is responsible for knowing all site conditions and all underground utilities, pipes and structures, and shall take sole responsibility for replacement costs incurred due to damage during construction. Contractor shall call for all underground utilities to be marked-out in field prior to excavation. Before excavation, verify the location of underground utilities. Call Dig Alert (underground services alert) 1(800)422-4133 or 1(800)227-2600
4. The Landscape or Irrigation Contractor is to verify existing PSI at the job site prior to installing the landscape irrigation system. Verification shall be made with the City of Oceanside Water Utilities Department (760-435-5800). Discrepancies between the design pressures shown on the plan and existing static pressure shall be reported to the project Landscape Architect (760-479-0644).
5. The Contractor shall not willfully proceed with construction when it is obvious that discrepancies exist between this plan and actual site conditions, and assumes responsibility that any discrepancies are brought to the attention of the owner's representative. The Contractor shall bear the cost of necessary revisions due to failure to give such notification, and no change in contract price will be allowed for actual or claimed discrepancy between existing conditions and those shown on plan.
6. The Contractor must notify the City Landscape Inspector (760-435-5098 or 760-435-5081) 48 hours (two working days) prior to starting construction. Within the 48 hours (2 working days) notice, prior to beginning landscape construction, the Job Superintendent, Landscape Contractor, Landscape Architect of Work, and the City Landscape Inspector shall meet for a pre-construction site meeting. Any work not meeting the approval of the Owner, Owner's representative or the approved landscape plan shall be corrected at the Contractor's expense.
7. All property and lot lines shall be verified and marked in an obvious manner prior to construction.
8. A soils report shall be prepared by (_____). Soils testing for agricultural suitability shall be accomplished at the conclusion of rough grading and submitted to the Public Works Landscape Inspector prior to soil preparation. Contact the Landscape Architect (760-479-0644) for a copy of the soils analysis, dated (01/19/18), prior to beginning work.
9. All reduced pressure backflow preventers and pressure vacuum breaker assemblies shall be tested by a City approved certified tester after installation, relocation, or repairs. Notify the Oceanside Water Utilities Department for a current list (760-435-5800). The original backflow certification shall be submitted to the Water Utilities Department. The Developer/ Owner is responsible for supplying a copy of the test results to the City Public Works Landscape Inspector.
10. Approved landscape plans and specifications, and the City of Oceanside Guidelines and Specifications for Landscape Development (1985, addenda 1997) shall be at the job site location at all times.
11. The Contractor or Developer is required to fully maintain all landscaping for 1 (one) year prior to City acceptance of all improvements. The 1 (one) year maintenance period shall begin when the 'As-Built' plans have been completed and approved by the City Engineer
12. Turfed areas shall have a maximum design slope of 4:1. Ground cover areas shall have a maximum design slope of 2:1.
13. All graffiti shall be removed within 24 hours of occurrence.
14. Wall locations are shown for general placement only. Refer to Precise Grading Plan for final location of all tops of slope, toes of slope, property lines and easements. (Final location of walls and fences shall be approved in writing by the project Landscape Architect and Civil Engineer prior to installation.) Notify Landscape Architect of any discrepancies between the plan and actual site conditions prior to commencing work.
15. For details not referenced or shown on these plans, please refer to manufacturer's specifications for installation.
16. The Landscape Architect is aware of the City of Oceanside policy which prohibits trees and permanent structures in utility easements and has designed the project landscape plans in accordance with this requirement, based on the easement information I have received from the project Engineer of work. I have verified that these plans meet the requirements of said policy.
17. The project Contractor shall be aware of the City of Oceanside policy which prohibits trees and structures in utility easements and shall install the project in accordance with this requirement. The Contractor shall verify the location of all easements, properly mark or stake all easements and verify the scope of work within the easement prior to installing improvements within any easement.
18. Landscape Contractor shall provide controller and/ or flow sensor certification (if applicable) prior to termination of Contractor's maintenance period.

HOLD HARMLESS AND INDEMNIFICATION CLAUSE

Contractor agrees that he shall assume sole responsibility for job site conditions during the course of construction of this project, including safety of all persons & property; that this requirement shall apply continuously & not be limited to normal working hours & that the Contractor shall defend, indemnify, & the Landscape Architect harmless from any & all liability real or alleged, in connection with the performance of work on this project, excepting for liability arising from sole negligence of the Owner, the City/County of local jurisdiction, or the Landscape Architect.

DECLARATION OF RESPONSIBLE CHARGE

I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6703 of the Business and Professions Code, and that the design is consistent with current standards.

I understand that the check of project drawings and specifications by the City of Oceanside and the County of San Diego Department of Environmental Health is confined to a review only and does not relieve me, as Landscape Architect of work, of my responsibilities for project design.

As the Landscape Architect of Work I indemnify the City of Oceanside, it's officer's, agents and employees to be held harmless from any and all liability, claims, negligent acts, errors or omissions of the Landscape Architect of Work, my employees, agents or consultants.

JIM BENEDETTI, LANDSCAPE ARCHITECT RLA #3054

GUARANTEE FOR CONTRACTUAL LANDSCAPE SERVICES

I have contracted with the Landscape Architect of Record to perform field observations and construction inspections to assure that the project will be constructed in accordance with the approved landscape plans, and all applicable City requirements and standard construction practices.

DEVELOPER/ OWNER Date

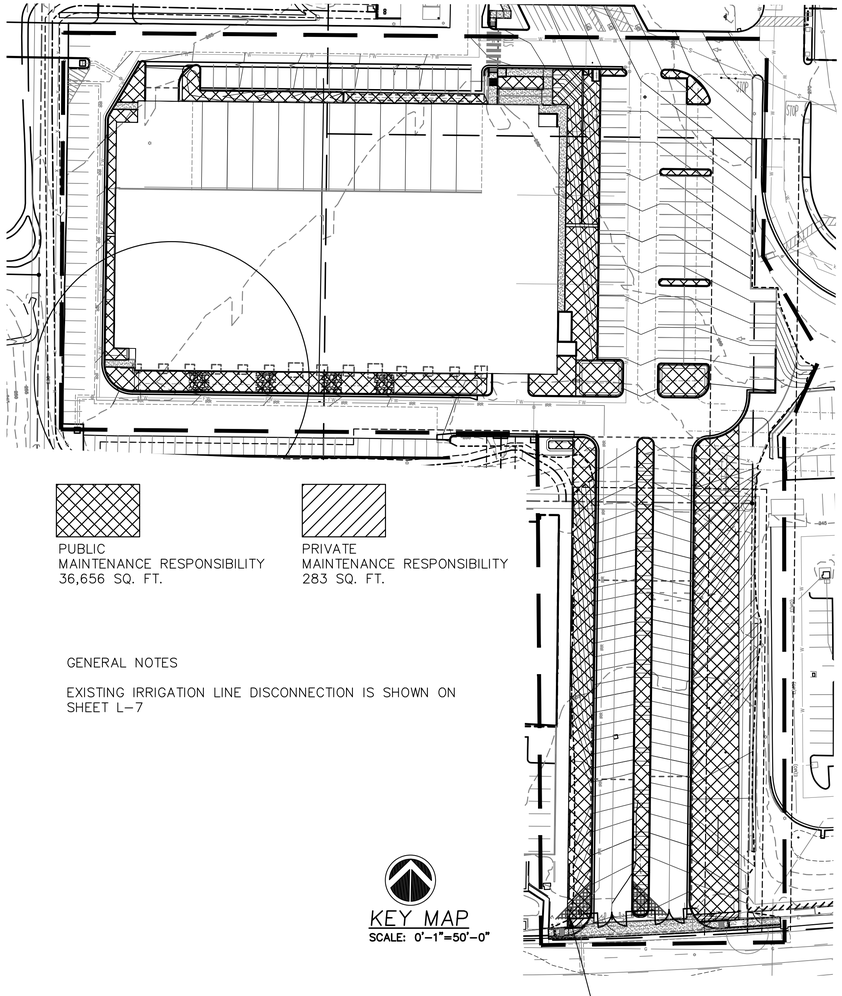
LANDSCAPE PLANS AS-BUILT CERTIFICATION

I hereby certify that all landscaping and irrigation have been constructed under the observation of a qualified Landscape Architect and in accordance with recommendations & specifications set forth in the project agricultural soil report, the City Water Conservation Ordinance, the City of Oceanside Guidelines & Specifications for Landscape Development, & any other applicable ordinances & requirements.

I hereby certify that these landscape plans reflect an accurate & correct representation of the As-Built conditions

LICENSED LANDSCAPE ARCHITECT JAMES P. BENEDETTI R.L.A. #3058 STATE OF CALIFORNIA
Signature
Ren Date 3/30/18
Date

Landscape Architect of Record Date



PUBLIC MAINTENANCE RESPONSIBILITY 36,656 SQ. FT.

PRIVATE MAINTENANCE RESPONSIBILITY 283 SQ. FT.

GENERAL NOTES

EXISTING IRRIGATION LINE DISCONNECTION IS SHOWN ON SHEET L-7

KEY MAP
SCALE: 0'-1"=50'-0"

PROPOSED 2" WATER METER LOCATION. STATIC WATER PRESSURE AVAILABLE 108 PSI (CITY OF OCEANSIDE 3-12-18)

SHEET INDEX

OWNER

TRI CITY MEDICAL CENTER
4002 VISTA WAY OCEANSIDE, CA 92056
760-940-7709
CONTACT NAME: CHRIS MIECHOWSKI
EMAIL: MIECHOWSKICJ@TCMC.COM

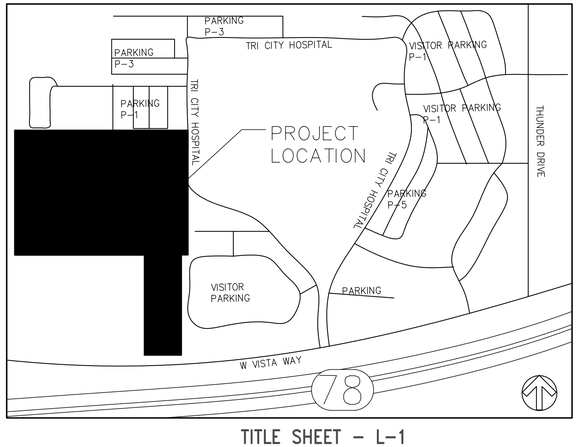
LANDSCAPE ARCHITECT

JPBLA, INC.
4403 MANCHESTER AVE. SUITE 201
ENCINITAS, CA 92024 760/479-0644
CONTACT NAME: JIM BENEDETTI
EMAIL: jim@jpbla.com

CIVIL ENGINEER

BWE
9449 BALBOA AVE, SUITE 270
SAN DIEGO, CA 92123
619/299 5550
CONTACT NAME: JOE ROEN
EMAIL: JROEN@BWESD.COM

VICINITY MAP



APPROVED CHANGES		
Description	Approved by	Date

SUBMITTAL DATE BLOCK	
1ST	01/23/2018
2ND	02/12/2018
3RD	05/21/2018
	DATE
	DATE
	DATE
	DATE
	DATE

CITY OF OCEANSIDE - SIGNATURES

FIRE MARSHALL DATE

CITY PLANNER DATE

SHEET 1	CITY OF OCEANSIDE ENGINEERING DIVISION	OF 16

LANDSCAPE ARCHITECTURAL PLANS FOR:
TRI-CITY MEDICAL CENTER

Approved
CITY ENGINEER STEVEN E. STRAPAC RCE 57654 DATE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked by
Approval date

L18-00001

TITLE SHEET - L-1

JPBLA, INC. PROJECT NO. 2017-29 760.479.0644 CITY OF OCEANSIDE TITLE SHEET - 5-21-18 20180529 BIDSET

OCEANSIDE WATER DISTRICT RECYCLED

RECYCLED WATER STANDARD PLAN NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
2. DRINKING WATER FOUNTAINS AND DESIGNATED OUTDOOR EATING AREAS SHALL BE PROTECTED AGAINST CONTACT WITH RECYCLED WATER SPRAY, MIST, OR RUNOFF.
3. BEST MANAGEMENT PRACTICES SHALL BE USED TO ELIMINATE OR CONTROL TO THE BEST EXTENT POSSIBLE PONDING, RUN-OFF, OVER-SPRAY AND MISTING.
4. HOSE BIBS ARE STRICTLY PROHIBITED.
5. CROSS-CONNECTIONS BETWEEN RECYCLED WATER LINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED.
6. NO SUBSTITUTIONS OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE OCEANSIDE MUNICIPAL WATER DISTRICT.
7. ALL MAINLINE PIPES SHALL HAVE WARNING TAPE PER OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
8. HOURS FOR IRRIGATION WITH RECYCLED WATER ARE FROM 9:00P.M. TO 6:00 A.M. THE HOURS FOR IRRIGATION WITH DISINFECTED TERTIARY RECYCLED WATER MAY BE MODIFIED BY THE LOCAL AUTHORITY. IRRIGATION DURING PUBLIC USE PERIODS WITH DISINFECTED TERTIARY RECYCLED WATER SHALL BE UNDER THE SUPERVISION OF THE DESIGNATED USER SUPERVISOR. IRRIGATION WITH WATER OF A LESSER QUALITY THAN DISINFECTED TERTIARY RECYCLED WATER SHALL BE BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M.
9. BURIAL OF ALL WIRING AND PIPING SHALL MEET OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
10. NON-DESIGNATED USE AREAS SHALL BE PROTECTED FROM CONTACT WITH RECYCLED WATER, WHETHER BY WIND BLOWN SPRAY OR BY DIRECT APPLICATION THROUGH IRRIGATION OR OTHER USE. LACK OF PROTECTION, WHETHER BY DESIGN, CONSTRUCTION PRACTICE OR SYSTEM OPERATION, IS STRICTLY PROHIBITED.
11. IRRIGATION HEADS SHALL BE RELOCATED OR ADJUSTED TO MINIMIZE OR ELIMINATE OVER-SPRAYING ON SIDEWALKS, STREETS AND NON-DESIGNATED USE AREAS.
12. RECYCLED WATER QUICK COUPLING VALVES SHALL BE OF A TYPE DESIGNED FOR THE USE ON RECYCLED WATER DISTRIBUTION SYSTEMS PER OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
13. ON RECYCLED WATER SYSTEMS, ALL APPURTENANCES (SPRINKLER HEADS, VALVE BOXES, ETC.) SHALL BE COLOR-CODED PURPLE PER AWWA GUIDELINES AND SECTION 116815 OF THE CALIFORNIA HEALTH AND SAFETY CODE.
14. ALL IRRIGATION PIPES SHALL BE STENCILED WITH THE WARNING, "NON-POT ABLE OR RECYCLED WATER," COLOR-CODED (PURPLE) AND LAID WITH.WARNING TAPE AND STENCILING ORIENTED TOWARD THE TOP OF THE TRENCH PER THE OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS..
15. ON NEW ON-SITE SYSTEMS (POST-METER), POTABLE WATER, CONSTANT PRESSURE RECYCLED WATER AND SEWER LINES SHOULD BE PLACED A MINIMUM OF FOUR FEET APART OR AS DIRECTED BY THE PROJECT ENGINEER AND /OR REGULATORY AGENCY. MEASUREMENTS SHALL BE BETWEEN FACING SURFACES, NOT PIPE CENTERLINES.
16. CONSTANT PRESSURE RECYCLED WATER LINES SHALL CROSS AT LEAST TWELVE INCHES BELOW POTABLE WATER LINES AND MAINTAIN AT LEAST TWELVE INCHES CROSSING SEPARATION BETWEEN OTHER UTILITIES.
17. IF A CONSTANT PRESSURE RECYCLED WATER LINE MUST BE INSTALLED ABOVE A POTABLE WATER LINE OR LESS THAN TWELVE INCHES BELOW A POTABLE WATER LINE, THEN THE RECYCLED WATER LINE SHALL BE INSTALLED WITHIN AN APPROVED PROTECTIVE SLEEVE AS PER THE OCEANSIDE MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
18. DEVELOPER/CONTRACTOR SHALL CONDUCT A CROSS-CONNECTION TEST AND COVERAGE TEST AS DIRECTED BY OCEANSIDE MUNICIPAL WATER DISTRICT'S AND THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH PRIOR TO ANY USE OF RECYCLED WATER.
19. THE REQUIRED CROSS-CONNECTION INSPECTION SHALL BE DONE BY EITHER THE OCEANSIDE MUNICIPAL WATER DISTRICT AND/OR THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
20. THE DESIGN AND LOCATIONS PROPOSED FOR RECYCLED WATER "DO NOT DRINK" SIGNS SHALL BE CALLED OUT ON THE PLANS.
21. WHEN RECYCLED WATER BECOMES AVAILABLE, AN ON-SITE USER SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, WITH THE BASIC CONCEPTS OF BACKFLOW/CROSS-CONNECTION PROTECTION, THE RECYCLED PURVEYOR'S RULES AND REGULATIONS AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO THE OCEANSIDE MUNICIPAL WATER DISTRICT AND/OR THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.

   IN CASE OF EMERGENCY CONTACT JAVIR LOPEZ (NAME) AT 760-753-0179 EXT. 5404 (PHONE NUMBER).

   OR AFTER HOURS CONTACT JAVIR LOPEZ (NAME) AT 760-753-0179 EXT. 5404 (PHONE NUMBER).
22. ALL PUBLIC AND PRIVATE POTABLE WATER MAINS INCLUDING FIRE MAINS AND ANY WATER WELLS AND WATER COURSES WITHIN THE RECYCLED WATER PROJECT SHALL BE SHOWN ON THE PLANS.
23. CALL OUT ON THE PLANS IF THERE ARE OR ARE NOT DRINKING FOUNTAINS AND/OR DESIGNATED OUTDOOR EATING AREAS ON THIS SITE.
24. EDUCATE ALL MAINTENANCE PERSONNEL ON A CONTINUOUS BASIS OF THE PRESENCE OF RECYCLED WATER. PERSONNEL MUST BE INFORMED THAT RECYCLED WATER IS MEANT FOR IRRIGATION PURPOSES ONLY, AND IS NOT APPROVED FOR DRINKING PURPOSES, HAND WASHING, CLEANING OF TOOLS, ETC. GIVEN THE HIGH TURNOVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY IT IS IMPORTANT THIS INFORMATION BE DISSEMINATED ON AN ALMOST DAILY BASIS.
25. A PHYSICAL SEPARATION SHALL BE PROVIDED BETWEEN ADJACENT AREAS IRRIGATED WITH RECYCLED WATER AND POTABLE WATER. SEPARATION SHALL BE PROVIDED BY DISTANCE, CONCRETE MOW STRIPS OR OTHER APPROVED METHODS.

LANDSCAPE IMPROVEMENT PLANS FOR:

TCMC PARKING STRUCTURE
4002 VISTA WAY
OCEANSIDE, CA 92056
APN 166-020-3200 AND 166-010-4300

RECYCLED IRRIGATION USE AREA

POTABLE IRRIGATION USE AREA

THERE ARE NO DRINKING FOUNTAINS ON THIS SITE WITHIN THE IRRIGATED AREAS. ALL DRINKING FOUNTAINS ARE ON THE BUILDING.

THERE ARE NO FIRE HYDRANTS WITHIN THE PROJECT WORK LIMIT LINE.

THERE ARE NO WELLS ON THIS SITE.

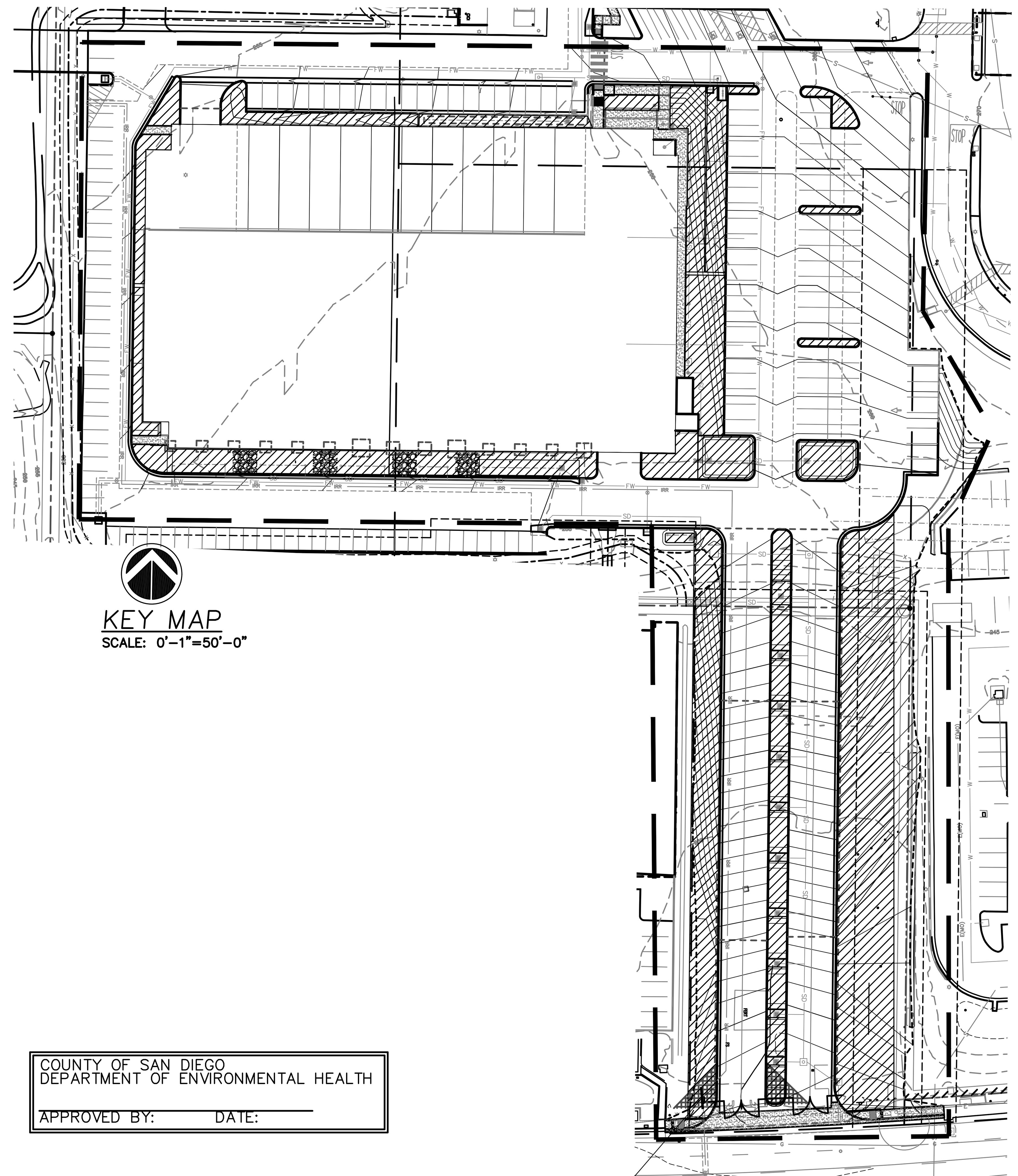
THERE ARE NO WATER COURSES OR MAJOR CATCH BASINS WITHIN THE PROJECT WORK LIMIT LINE.

NO OVERSPRAY OR RUNOFF WILL AFFECT VENTS, ACCESS AREAS, ETC. OF THE CONCRETE TANK.

NOTE: EXISTING MAINLINE LOCATION AND POINT OF CONNECTION CAN BE FOUND ON SHEET L-9 OF PREVIOUSLY APPROVED LANDSCAPE PLANS

INDEX MAP LEGEND

▨ NEW AREAS TO BE IRRIGATED WITH RECYCLED WATER ASSOCIATED WITH PROJECT



KEY MAP
SCALE: 0'-1"=50'-0"

FUTURE RECYCLED WATER METER LOCATION

ALL WATER IS CURRENTLY POTABLE, THIS IS THE FUTURE RECYCLED WATER MAP

LANDSCAPE NOTES:
1. ALL LANDSCAPE AND IRRIGATION SHALL BE DEVELOPED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE CITY COUNCIL AS SET FORTH IN THE CITY OF OCEANSIDES LANDSCAPE ORDINANCE, ON FILE IN THE OFFICE OF THE CITY CLERK.
2. IF ANY HARDSCAPE OR LANDSCAPE INDICATED ON THE APPROVED PLANS IS DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED OR REPLACED IN KIND WITH EQUIVALENT SIZE PER THE APPROVED PLANS.
3. TREES SHALL BE LOCATED AND MAINTAINED TO PRESERVE A CLEAR ZONE OF AT LEAST TEN FEET FROM FIRE HYDRANTS, OVERHEAD UTILITY WIRES, STREET LIGHT LUMINARIES AND ABOVE GROUND UTILITY STRUCTURES SUCH AS TRANSFORMER ENCLOSURES.
4. TREES SHALL BE PLANTED AT LEAST FIVE FEET FROM ANY UNDERGROUND UTILITY SUCH AS SEWER, GAS, ELECTRIC AND TELEPHONE. RIPARIAN TREE SPECIES SHALL BE PLANTED AT LEAST 30 FEET FROM CITY SEWER, WATER AND DRAINLINES.
5. PROVIDE 'BIOBARRIER' ROOT BARRIERS FOR TEN FEET TO BOTH SIDES OF ALL STREET TREES WITH IN SIX FEET OF ANY HARDSCAPE PAVING.
6. AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED TO PROVIDE COVERAGE FOR ALL PLANTING AREAS SHOWN ON THE PLAN.
7. LOW VOLUME EQUIPMENT SHALL PROVIDE SUFFICIENT WATER FOR PLANT GROWTH WITH A MINIMUM WATER LOSS DUE TO WATER RUN-OFF.
8. IRRIGATION SYSTEMS SHALL USE HIGH QUALITY, AUTOMATIC CONTROL VALVES, CONTROLLERS AND OTHER NECESSARY IRRIGATION EQUIPMENT.
9. ALL COMPONENTS SHALL BE OF NON-CORROSIVE MATERIAL.
10. ALL DRIP SYSTEMS SHALL BE ADEQUATELY FILTERED AND REGULATED PER THE MANUFACTURER'S RECOMMENDED DESIGN PARAMETERS.
11. ALL IRRIGATION IMPROVEMENTS SHALL FOLLOW THE CITY OF OCEANSIDE GUIDELINES AND WATER CONSERVATION ORDINANCE.

LICENSED LANDSCAPE ARCHITECT
JAMES P. BENEDETTI · 3058
[illegible]
Signature
Ren Date 9/30/18
Date 5/21/18
STATE OF CALIFORNIA

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH

APPROVED BY: DATE:

SHEET INDEX

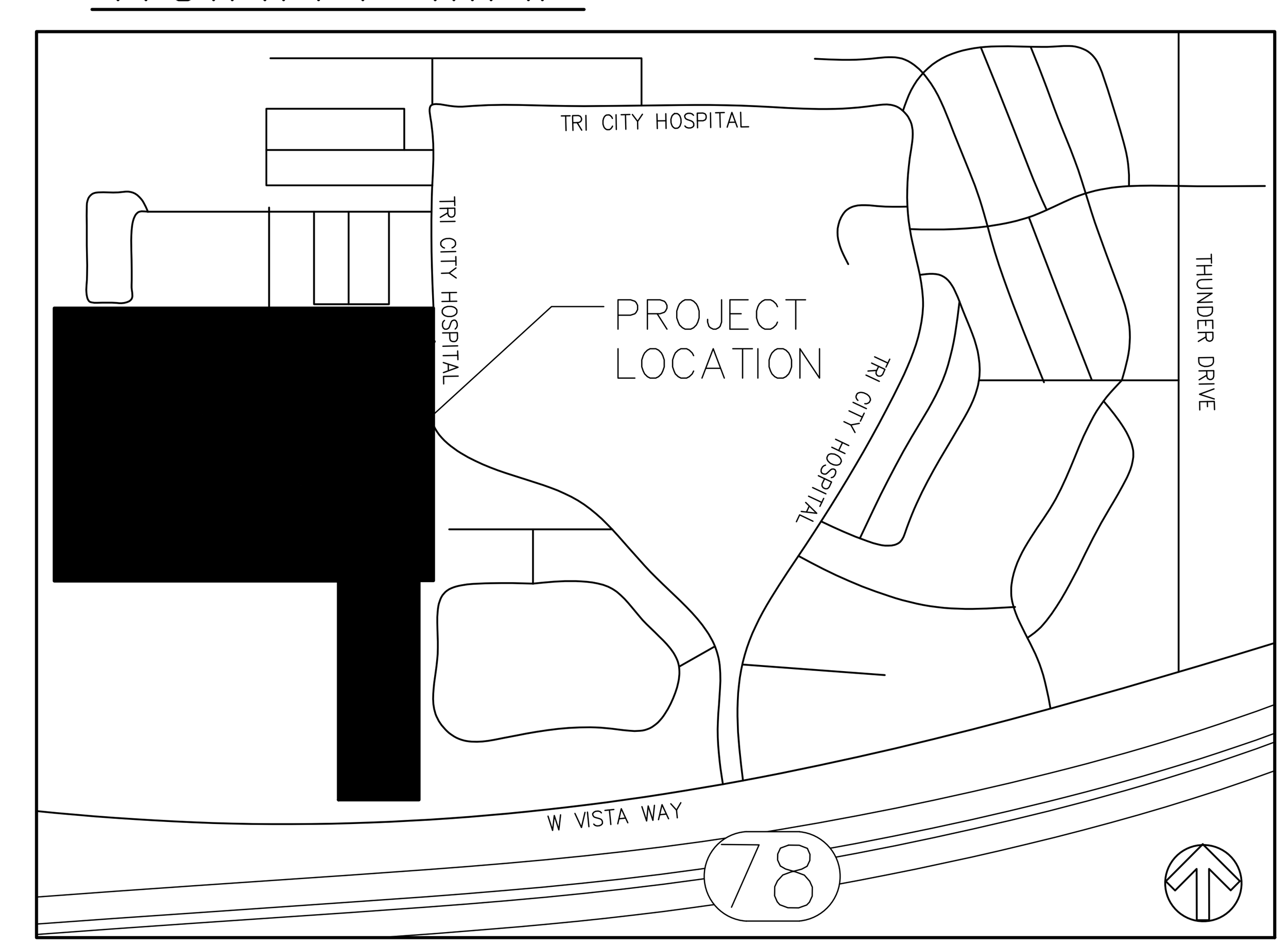
#RW2683
20180529 BIDSET

OWNER
TRI CITY MEDICAL CENTER
4002 VISTA WAY OCEANSIDE, CA 92056
760-940-7709
CONTACT NAME: CHRIS MIECHOWSKI
EMAIL: MIECHOWSKICJ@TCMC.COM

LANDSCAPE ARCHITECT
JPBLA, INC.
4403 MANCHESTER AVE. SUITE 201
ENCINITAS, CA 92024 760/479-0644
CONTACT NAME: JIM BENEDETTI
EMAIL: jim@jpbla.com

CIVIL ENGINEER
BWE
9449 BALBOA AVE, SUITE 270
SAN DIEGO, CA 92123
619/299 5550
CONTACT NAME: JOE ROEN
EMAIL: JROEN@BWESD.COM

VICINITY MAP



RECYCLED WATER TITLE SHEET - L-2

APPROVED CHANGES			SUBMITTAL DATE BLOCK		CITY OF OCEANSIDE - SIGNATURES
Description	Approved by	Date	1ST	01/23/2018	
			2ND	02/12/2018	
			3RD	05/21/2018	FIRE MARSHALL DATE
				DATE	
				DATE	CITY PLANNER DATE
				DATE	
				DATE	
				DATE	

SHEET 2	CITY OF OCEANSIDE ENGINEERING DIVISION	OF 16

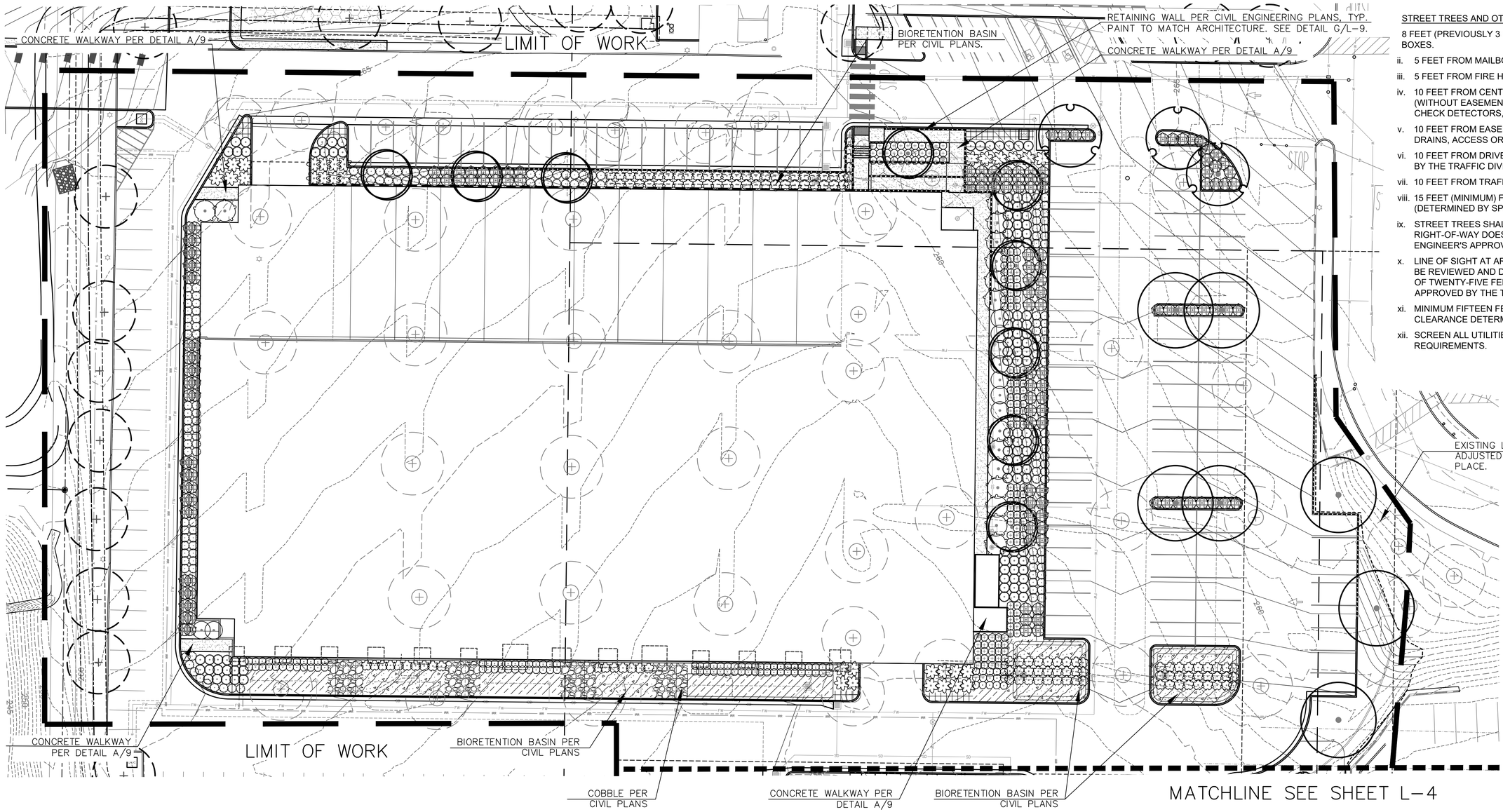
LANDSCAPE ARCHITECTURAL PLANS FOR:
TRI-CITY MEDICAL CENTER

POINT OF CONTRACT - FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK	Checked by	L18-00001
JAMES P. BENEDETTI R.L.A. #3058	Approval date	

CITY OF OCEANSIDE TITLE SHEET - 02-12-18

JPBLA, INC. PROJECT NO. 2017-29 760.479.0644



STREET TREES AND OTHER TREES SHALL BE SPACED:

8 FEET (PREVIOUSLY 3 FEET) FROM TRANSFORMERS, CABLE, AND PULL BOXES.

ii. 5 FEET FROM MAILBOXES

iii. 5 FEET FROM FIRE HYDRANTS (ALL SIDES)

iv. 10 FEET FROM CENTERLINE (PREVIOUSLY 7 FEET) OF ALL UTILITY LINES (WITHOUT EASEMENT) (SEWER, WATER, STORM DRAINS, DOUBLE CHECK DETECTORS, AIR RELIEF VALVES AND GAS)

v. 10 FEET FROM EASEMENT BOUNDARIES (SEWER, WATER, STORM DRAINS, ACCESS OR OTHER UTILITIES)

vi. 10 FEET FROM DRIVEWAYS (UNLESS A LINE OF SIGHT IS DETERMINED BY THE TRAFFIC DIVISION TO BE OTHERWISE)

vii. 10 FEET FROM TRAFFIC AND DIRECTIONAL SIGNS

viii. 15 FEET (MINIMUM) FROM STREETLIGHTS, OTHER UTILITY POLES, (DETERMINED BY SPECIFICATIONS)

ix. STREET TREES SHALL BE PLANTED 3' OUTSIDE RIGHT-OF-WAY IF THE RIGHT-OF-WAY DOES NOT ALLOW SPACE, SUBJECT TO THE CITY ENGINEER'S APPROVAL.

x. LINE OF SIGHT AT ARTERIALS, COLLECTOR AND LOCAL STREETS SHALL BE REVIEWED AND DETERMINED BY TRAFFIC ENGINEER. A MINIMUM OF TWENTY-FIVE FEET (25') FROM STREET INTERSECTION OR AS APPROVED BY THE TRAFFIC ENGINEER.

xi. MINIMUM FIFTEEN FEET (15') STREETLIGHT AND STOP SIGN OR CLEARANCE DETERMINED BY SPECIFICATIONS.

xii. SCREEN ALL UTILITIES ACCORDING TO SPECIFIC AGENCY REQUIREMENTS.

LANDSCAPE NOTE:

1. ALL LANDSCAPE AND IRRIGATION SHALL CONFORM TO THE CITY OF OCEANSIDE'S LANDSCAPE STANDARDS AND ALL OTHER APPLICABLE CITY AND REGIONAL STANDARDS FOR LANDSCAPE INSTALLATION AND MAINTENANCE.
2. TREES PLANTED WITHIN 6 FEET OF WALKS, CURBS OR PAVING SHALL BE PLANTED WITH A ROOT BARRIER (BIO-BARRIER).
3. SHREDDED BARK MULCH - REQUIRED 3-INCH DEPTH IN ALL PLANTER AREAS OR A 2-INCH DEPTH WHEN PROPOSING SUCCULENTS OR CACTI. IN NO CASE SHALL BARK MULCH CONTAIN NATURAL COLORED OR STAINED COLORED PLYWOOD. ALL PLANTING AREAS SHALL BE FINISHED WITH FOREST MULCH AVAILABLE THROUGH AGRISERVICE INDUSTRIES, INC. (619) 744-0942.
4. IF ANY EXISTING HARDSCAPE OR LANDSCAPE INDICATED ON THE APPROVED PLANS ARE DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED AND/OR REPLACED IN KIND AND EQUIVALENT SIZE PER THE APPROVED PLANS BY THE OWNER/PERMITTEE.
5. ALL LANDSCAPE MATERIALS SHALL BE PERMANENTLY MAINTAINED IN A GROWING AND HEALTHY CONDITION AT ALL TIMES, INCLUDING TRIMMING AS APPROPRIATE TO MAINTAIN APPROVED LANDSCAPE MATERIALS.
6. BARRIERS (BIO-BARRIER) SHALL BE INSTALLED FOR ALL STREET TREES REGARDLESS OF THE DISTANCE FROM THE HARDSCAPE. ROOT BARRIERS SHALL NOT BE WRAPPED AROUND THE ROOTBALL. ROOT BARRIERS SHALL BE INSTALLED ADJACENT TO ALL PAVING SURFACES WHERE A PAVING SURFACE IS LOCATED WITHIN 6 FEET OF A TREE TRUNK ON SITE (PRIVATE) AND WITHIN 10 FEET OF A TREE TRUNK IN THE RIGHT-OF-WAY (PUBLIC). ROOT BARRIERS SHALL EXTEND 5 FEET IN EACH DIRECTION FROM THE CENTERLINE OF THE TRUNK, FOR A TOTAL DISTANCE OF 10 FEET. ROOT BARRIERS SHALL BE 24 INCHES IN DEPTH. INSTALLING A ROOT BARRIER AROUND THE TREE'S ROOT BALL IS UNACCEPTABLE.
7. ALL STREET TREES SHALL COMPLY WITH THE CITY OF OCEANSIDE APPROVED STREET TREES AND STANDARD DETAIL 211A.
8. FINAL LANDSCAPE PLANS SHALL ACCURATELY SHOW PLACEMENT OF TREES, SHRUBS, AND GROUNDCOVERS.
9. LANDSCAPE ARCHITECT SHALL BE AWARE OF UTILITY, SEWER, STORM DRAIN EASEMENT AND PLACE PLANTING LOCATIONS ACCORDINGLY TO MEET CITY OF OCEANSIDE REQUIREMENTS.
10. ALL REQUIRED LANDSCAPE AREAS SHALL BE MAINTAINED BY OWNER OR AS STATED IN ANY LEGAL DOCUMENT SUCH AS BUT NOT LIMITED TO A LEASE AGREEMENT. THE LANDSCAPE AREAS SHALL BE MAINTAINED PER CITY OF OCEANSIDE REQUIREMENTS.
11. THE SELECTION OF PLANT MATERIAL IS BASED ON CULTURAL, AESTHETIC, AND MAINTENANCE CONSIDERATIONS.
12. ALL PLANTING AREAS SHALL BE PREPARED WITH APPROPRIATE SOIL AMENDMENTS, FERTILIZERS, AND APPROPRIATE SUPPLEMENTS BASED UPON A SOILS REPORT FROM AN AGRICULTURAL SUITABILITY SOIL SAMPLE TAKEN FROM THE SITE.
13. GROUND COVERS OR BARK MULCH SHALL FILL IN BETWEEN THE SHRUBS TO SHIELD THE SOIL FROM THE SUN, EVAPOTRANSPORATION AND RUN-OFF.
14. THE SHRUBS SHALL BE ALLOWED TO GROW IN THEIR NATURAL FORMS.
15. ALL LANDSCAPE IMPROVEMENTS SHALL FOLLOW THE CITY OF OCEANSIDE GUIDELINES.
16. LANDSCAPE IMPROVEMENT PLAN SET AND INSTALLATION ARE REQUIRED TO IMPLEMENT APPROVED FIRE DEPT. REGULATIONS, CODES, AND STANDARDS AT THE TIME OF PROJECT APPROVAL.
17. ALL FIRE HYDRANTS, DOUBLE CHECK DETECTORS, POST INDICATING VALVES, AND FIRE DEPARTMENT CONNECTIONS SHALL BE PROVIDED WITH A 3-FOOT CLEARANCE AROUND ALL FIRE APPARATUSES.
18. ALL TREES AT MATURITY SHALL MEET A HORIZONTAL CLEARANCE ALONG ALL ROADWAYS FROM CURB TO CURB. HORIZONTAL ROADWAY CLEARANCE FOR A ONE-STORY BUILDING IS 28-FEET WIDE.
19. ALL TREES AT MATURITY SHALL MEET A VERTICAL CLEARANCE OF 14-FEET FROM THE TOP OF THE ROADWAY TO THE LOWEST BRANCHES.
20. A TRASH RECEPTACLE WILL BE PLACED ON EACH FLOOR AT THE ELEVATOR/STAIR LOCATION, AND WILL BE COLLECTED BY USING EXISTING TRASH BINS ON-SITE.
21. LANDSCAPE FOR THE SITE SHOULD MAINTAIN 7 FT. CANOPY ON ALL TREES AND A 2 FT. MAXIMUM HEIGHT ON ALL GROUNDCOVER.
22. INCLUDE A MINIMUM VERTICAL CLEARANCE OF 13'-6" FROM TOP OF FIRE ACCESS ROADWAY TO LOWEST BRANCHES OF TREE AND A MINIMUM OF 28' (FEET) WIDTH CLEARANCE IN FIRE ACCESS ROADWAYS.

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert

CALL 811

TWO WORKING DAYS BEFORE YOU DIG

20 10 0 20 40 60

SCALE: 1"=20'-0"

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

L-3

SHEET	CITY OF OCEANSIDE ENGINEERING DIVISION	SHEETS
3		16

PLANTING PLAN

TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK

JAMES P. BENEDETTI R.L.A. #3058

Checked By:

Approval Date:

PLAN NUMBER L18-00001

20180529 BIDSET

MAINTENANCE RESPONSIBILITY NOTE:

THE PROPERTY OWNERS ARE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL LANDSCAPED AREAS ON SITE, AS WELL AS CONTIGUOUS PLANTING AREAS WITHIN THE PUBLIC RIGHT-OF-WAY. ALL LANDSCAPED AREAS SHALL BE KEPT FREE OF WEEDS AND DEBRIS. PLANTINGS SHALL BE MAINTAINED IN A HEALTHY, VIGOROUSLY GROWING CONDITION, AND SHALL RECEIVE REGULAR PRUNING, FERTILIZING, MOWING AND TRIMMING. IRRIGATION SYSTEMS SHALL BE REGULARLY INSPECTED AND KEPT IN FULLY OPERATIONAL CONDITION ACCORDING TO MANUFACTURERS' DESIGN STANDARDS AT ALL TIMES.

TREE PROTECTION NOTE:

TREES OR PALMS TO BE PROTECTED IN PLACE AND TO REDUCE THE NEGATIVE IMPACTS DURING CONSTRUCTION (CLEARING, DEMOLITION, GRADING, AND BUILDING CONSTRUCTION) SHALL BE NOTED ON LANDSCAPE PLANS. TREE PROTECTION ZONES AND TREE PROTECTION MEASURES SHALL BE NOTED ON THE PLAN SUCH AS BUT NOT LIMITED TO: SOIL DISTURBANCE; GRADE/ELEVATION CHANGES; AND EXCAVATION. ALL OTHER PROTECTION MEASURES SHALL BE NOTED ON THE PLAN SUCH AS BUT NOT LIMITED TO: CUTTING OF TREE ROOTS; MULCHING OR WOOD CHIPS TO TEMPORARILY PROTECT ROOTS; CHANGES IN DRAINAGE; STORAGE OR PARKED VEHICLES OR EQUIPMENT; BUILDING MATERIALS AND REFUSE; DUMPING OF POISONOUS OR TOXIC MATERIALS ON OR AROUND TREES AND ROOTS; NO USAGE OF TREE TRUNKS AS SUPPORT, ANCHORAGE, OR POSTING OF SIGNS; AND TEMPORARY FENCING AND SIGNAGE TO PROHIBIT SUCH USAGE. IN SOME CASES, WRITTEN RECOMMENDATIONS FROM AN INTERNATIONAL SOCIETY OF ARBORICULTURE - CERTIFIED ARBORIST, CONSULTING ARBORIST, OR CERTIFIED URBAN FORESTER MAY BE REQUIRED TO SUPPORT DOCUMENTATION.

LANDSCAPE CALCULATIONS

PARKING AREA = 22,924 SQ. FT.
LANDSCAPE IN PARKING AREA = 1,143 SQ. FT (5%)

SITE COVERAGE CALCULATIONS

PROPOSED SITE AREA = 210,578 SQ. FT.
PROPOSED AREA = 36,939 SQ. FT (5.3%)

EXISTING SITE AREA = 210,578 SQ. FT.
EXISTING LANDSCAPE AREA= 22,924 SQ. FT. (9%)

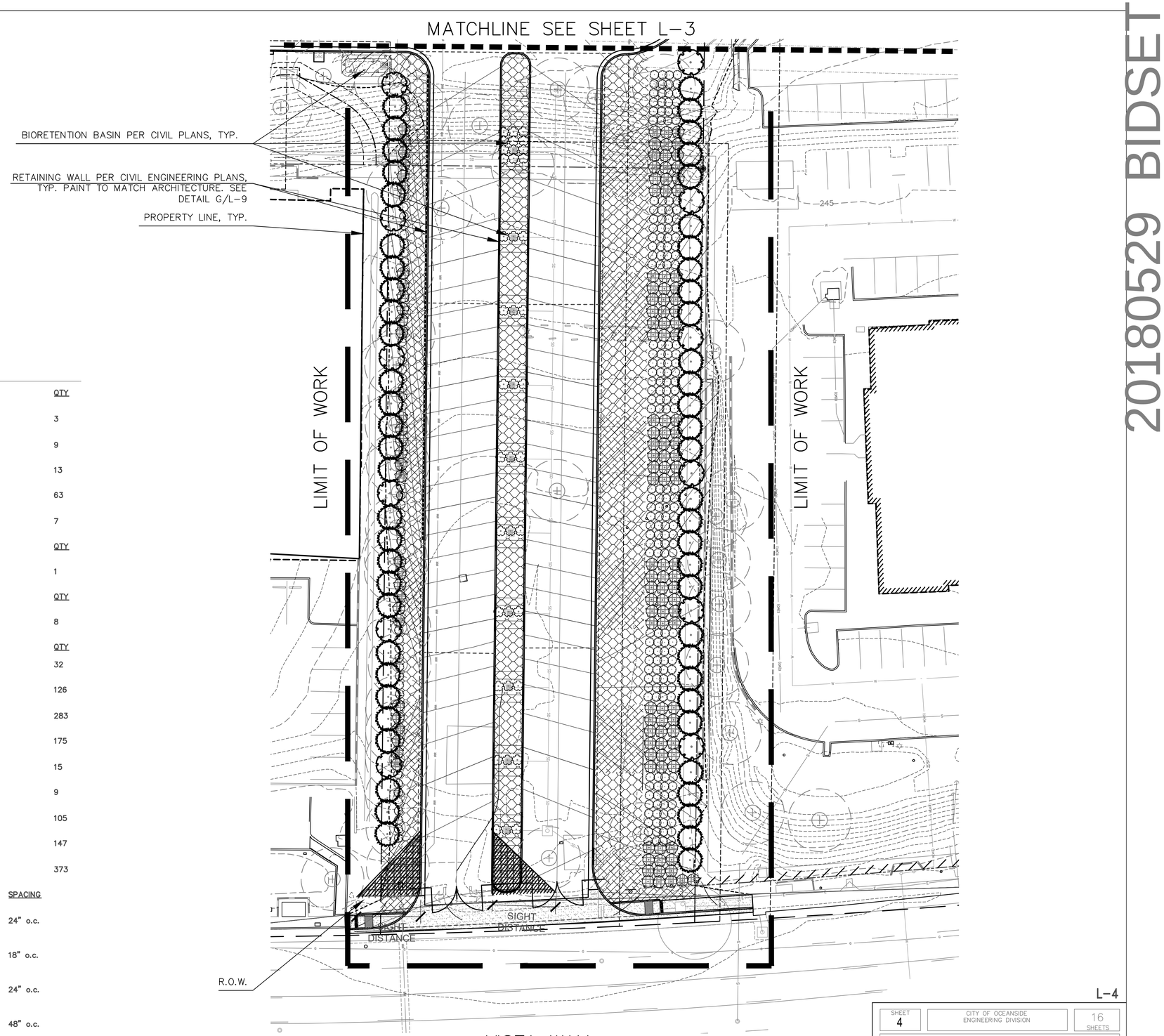
UTILITY LEGEND

- STORM DRAIN
- ELECTRICAL LINE
- POTABLE WATER LINE
- SEWER LINE
- GAS LINE
- PROPERTY LINE
- R.O.W. LINE

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
	ARBUTUS UNEDO	STRAWBERRY TREE	24" BOX	L	3
	PINUS CANARIENSIS	CANARY ISLAND PINE	24" BOX	L	9
	PODOCARPUS GRACILIOR	FERN PINE	15 GAL	M	13
	PODOCARPUS GRACILIOR	FERN PINE	5 GAL	M	63
	QUERCUS ILEX	HOLLY OAK	24" BOX	L	7
TREES TO BE REMOVED	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**WUCOLS**	**QTY**
	EXISTING VEGETATION GRIND STUMP AND REMOVE DEBRIS	TO BE REMOVED	EXISTING		1
TREES TO PROTECT IN PLACE	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**WUCOLS**	**QTY**
	EXISTING VEGETATION	TO PROTECT IN PLACE	EXISTING		8
SHRUBS	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**WUCOLS**	**QTY**
	AGAVE ATTENUATA 'BLUE FLAME'	AGAVE	15 GAL	L	32
	ALOE STRIATA	CORAL ALOE	5 GAL	L	126
	CALLISTEMON CITRINUS 'LITTLE JOHN'	DWARF BOTTLE BRUSH	5 GAL	L	283
	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	L	175
	DODONAEA VISCOSA 'PURPUREA'	PURPLE LEAFED HOPSEED BUSH	15 GAL	L	15
	HETEROMELES ARBUTIFOLIA	TOYON	15 GAL	L	9
	LEYMUS CONDENSATUS 'CANYON PRINCE'	NATIVE BLUE RYE	5 GAL	L	105
	MUHLENBERGIA CAPILLARIS	PINK MUHLY	1 GAL	L	147
	RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN	5 GAL	L	373

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
	CAREX TUMILICOLA	FOOTHILL SEDGE	1 GAL.	L	24" o.c.
	GAZANIA X 'MITSUWA YELLOW'	YELLOW GAZANIA	FLAT	L	18" o.c.
	JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL.	L	24" o.c.
	ROSMARINUS OFFICINALIS 'HUNTINGTON CARPET'	HUNTINGTON CARPET ROSEMARY	1 GAL	L	48" o.c.
	SENECIO MANDRALISCAE 'BLUE CHALK STICKS'	SENECIO	FLAT	L	12" o.c.



L-4

LICENSED LANDSCAPE ARCHITECT — Signature — Ren Date — Date — STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

N
20 10 0 20 40 60
SCALE: 1"=20'-0"

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 4	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

PLANTING PLAN
TRI CITY MEDICAL CENTER

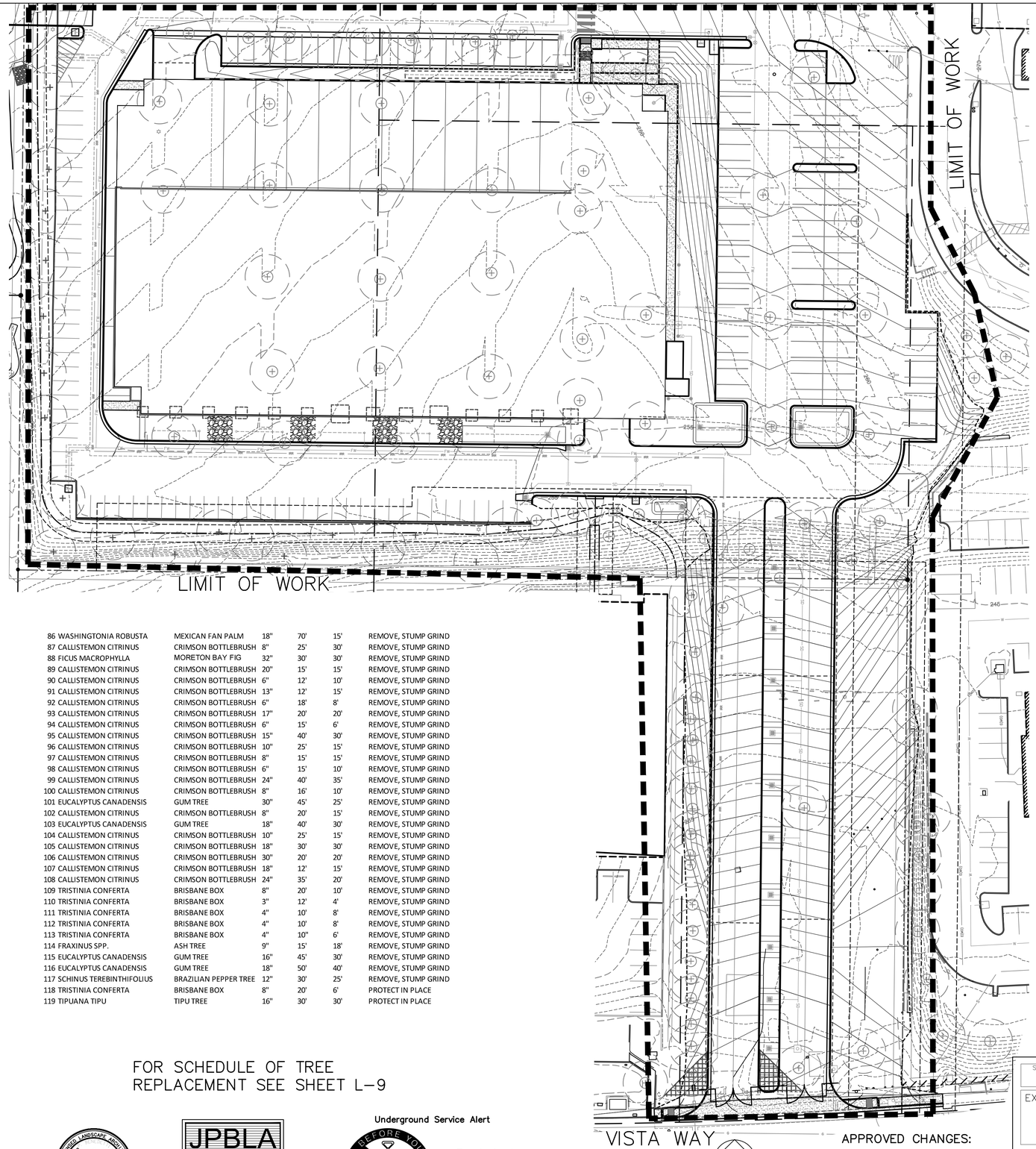
POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK	Checked By:	PLAN NUMBER
JAMES P. BENEDETTI R.L.A. #3058	Approval Date:	L18-00001

20180529 BIDSET

EXISTING TREE LEGEND

TREE NO.	BOTANICAL NAME	COMMON NAME	DBH	HEIGHT	SPREAD	COMMENTS
1	PINUS RAIDIATA	PINE TREE	22"	20'	20'	REMOVE, STUMP GRIND
2	PINUS RAIDIATA	PINE TREE	20"	20'	20'	REMOVE, STUMP GRIND
3	PINUS RAIDIATA	PINE TREE	17"	20'	15'	REMOVE, STUMP GRIND
4	PINUS RAIDIATA	PINE TREE				ALREADY REMOVED
5	PINUS RAIDIATA	PINE TREE				ALREADY REMOVED
6	PINUS RAIDIATA	PINE TREE	23"	20'	25'	REMOVE, STUMP GRIND
7	PINUS RAIDIATA	PINE TREE	25"	25'	25'	REMOVE, STUMP GRIND
8	PINUS RAIDIATA	PINE TREE	19"	20'	20'	REMOVE, STUMP GRIND
9	PINUS RAIDIATA	PINE TREE	24"	15'	15'	REMOVE, STUMP GRIND
10	PINUS RAIDIATA	PINE TREE	26"	20'	25'	REMOVE, STUMP GRIND
11	PINUS RAIDIATA	PINE TREE	22"	20'	25'	REMOVE, STUMP GRIND
12	PINUS RAIDIATA	PINE TREE	30"	25'	30'	REMOVE, STUMP GRIND
13	PINUS RAIDIATA	PINE TREE	14"	20'	15'	REMOVE, STUMP GRIND
14	PINUS RAIDIATA	PINE TREE	16"	15'	15'	REMOVE, STUMP GRIND
15	PINUS RAIDIATA	PINE TREE	20"	20'	20'	REMOVE, STUMP GRIND
16	PINUS RAIDIATA	PINE TREE	18"	20'	15'	REMOVE, STUMP GRIND
17	PINUS RAIDIATA	PINE TREE	24"	25'	25'	REMOVE, STUMP GRIND
18	PINUS RAIDIATA	PINE TREE	21"	25'	20'	REMOVE, STUMP GRIND
19	PINUS RAIDIATA	PINE TREE	22"	20'	20'	REMOVE, STUMP GRIND
20	PINUS RAIDIATA	PINE TREE	18"	20'	18'	REMOVE, STUMP GRIND
21	PINUS RAIDIATA	PINE TREE	20"	25'	20'	REMOVE, STUMP GRIND
22	PINUS RAIDIATA	PINE TREE	30"	30'	25'	REMOVE, STUMP GRIND
23	PINUS RAIDIATA	PINE TREE	20"	25'	25'	REMOVE, STUMP GRIND
24	PINUS RAIDIATA	PINE TREE	18"	25'	25'	REMOVE, STUMP GRIND
25	PINUS RAIDIATA	PINE TREE	20"	20'	20'	REMOVE, STUMP GRIND
26	PINUS RAIDIATA	PINE TREE	15"	25'	20'	REMOVE, STUMP GRIND
27	PINUS RAIDIATA	PINE TREE	23"	30'	25'	PROTECT IN PLACE
28	PINUS RAIDIATA	PINE TREE	27"	35'	20'	REMOVE, STUMP GRIND
29	PINUS RAIDIATA	PINE TREE	24"	30'	20'	REMOVE, STUMP GRIND
30	PINUS RAIDIATA	PINE TREE	21"	26'	22'	REMOVE, STUMP GRIND
31	PINUS RAIDIATA	PINE TREE	15"	15'	20'	REMOVE, STUMP GRIND
32	PINUS RAIDIATA	PINE TREE	17"	20'	15'	REMOVE, STUMP GRIND
33	PINUS RAIDIATA	PINE TREE	24"	30'	25'	REMOVE, STUMP GRIND
34	PINUS RAIDIATA	PINE TREE	20"	20'	25'	REMOVE, STUMP GRIND
35	PINUS RAIDIATA	PINE TREE	20"	30'	15'	REMOVE, STUMP GRIND
36	PINUS RAIDIATA	PINE TREE	24"	30'	25'	REMOVE, STUMP GRIND
37	PINUS RAIDIATA	PINE TREE	27"	35'	30'	REMOVE, STUMP GRIND
38	PINUS RAIDIATA	PINE TREE	34"	30'	20'	REMOVE, STUMP GRIND
39	PINUS RAIDIATA	PINE TREE	36"	35'	35'	REMOVE, STUMP GRIND
40	PINUS RAIDIATA	PINE TREE	30"	35'	30'	REMOVE, STUMP GRIND
41	PINUS RAIDIATA	PINE TREE	24"	30'	25'	REMOVE, STUMP GRIND
42	PINUS RAIDIATA	PINE TREE	28"	25'	15'	REMOVE, STUMP GRIND
43	PINUS RAIDIATA	PINE TREE	20"	25'	15'	REMOVE, STUMP GRIND
44	PINUS RAIDIATA	PINE TREE	22"	20'	25'	REMOVE, STUMP GRIND
45	PLATANUS RACEMOSA	SYCAMORE TREE	15"	25'	20'	PROTECT IN PLACE
46	PLATANUS RACEMOSA	SYCAMORE TREE	15"	35'	15'	PROTECT IN PLACE
47	PLATANUS RACEMOSA	SYCAMORE TREE	15"	45'	18'	PROTECT IN PLACE
48	PLATANUS RACEMOSA	SYCAMORE TREE	15"	45'	20'	PROTECT IN PLACE
49	EUCALYPTUS CANADENSIS	GUM TREE	24"	50'	40'	PROTECT IN PLACE
50	EUCALYPTUS CANADENSIS	GUM TREE	18"	45'	30'	PROTECT IN PLACE
51	EUCALYPTUS CANADENSIS	GUM TREE	16"	45'	35'	PROTECT IN PLACE
52	EUCALYPTUS CANADENSIS	GUM TREE	10"	25'	10'	PROTECT IN PLACE
53	EUCALYPTUS CANADENSIS	GUM TREE	12"	35'	15'	PROTECT IN PLACE
54	EUCALYPTUS CANADENSIS	GUM TREE	18"	35'	20'	PROTECT IN PLACE
55	EUCALYPTUS CANADENSIS	GUM TREE	12"	35'	20'	PROTECT IN PLACE
56	EUCALYPTUS CANADENSIS	GUM TREE	12"	35'	15'	PROTECT IN PLACE
57	EUCALYPTUS CANADENSIS	GUM TREE	12"	30'	20'	PROTECT IN PLACE
58	EUCALYPTUS CANADENSIS	GUM TREE	18"	40'	20'	PROTECT IN PLACE
59	EUCALYPTUS CANADENSIS	GUM TREE	24"	40'	25'	PROTECT IN PLACE
60	EUCALYPTUS CANADENSIS	GUM TREE	15"	50'	30'	PROTECT IN PLACE
61	EUCALYPTUS CANADENSIS	GUM TREE	20"	50'	40'	PROTECT IN PLACE
62	EUCALYPTUS CANADENSIS	GUM TREE	18"	50'	20'	PROTECT IN PLACE
63	EUCALYPTUS CANADENSIS	GUM TREE	13"	35'	30'	PROTECT IN PLACE
64	EUCALYPTUS CANADENSIS	GUM TREE	12"	35'	20'	PROTECT IN PLACE
65	EUCALYPTUS CANADENSIS	GUM TREE	20"	50'	30'	PROTECT IN PLACE
66	EUCALYPTUS CANADENSIS	GUM TREE	24"	55'	25'	PROTECT IN PLACE
67	EUCALYPTUS CANADENSIS	GUM TREE	21"	50'	40'	PROTECT IN PLACE
68	EUCALYPTUS CANADENSIS	GUM TREE	14"	40'	25'	PROTECT IN PLACE
69	EUCALYPTUS CANADENSIS	GUM TREE	24"	60'	40'	PROTECT IN PLACE
70	EUCALYPTUS CANADENSIS	GUM TREE	16"	60'	20'	PROTECT IN PLACE
71	EUCALYPTUS CANADENSIS	GUM TREE	18"	50'	20'	PROTECT IN PLACE
72	EUCALYPTUS CANADENSIS	GUM TREE	16"	40'	15'	PROTECT IN PLACE
73	EUCALYPTUS CANADENSIS	GUM TREE	20"	50'	30'	PROTECT IN PLACE
74	EUCALYPTUS CANADENSIS	GUM TREE	18"	40'	30'	PROTECT IN PLACE
75	EUCALYPTUS CANADENSIS	GUM TREE	10"	30'	15'	PROTECT IN PLACE
76	EUCALYPTUS CANADENSIS	GUM TREE	17"	55'	25'	REMOVE, STUMP GRIND
77	EUCALYPTUS CANADENSIS	GUM TREE	18"	60'	30'	REMOVE, STUMP GRIND
78	EUCALYPTUS CANADENSIS	GUM TREE	16"	50'	20'	REMOVE, STUMP GRIND
79	EUCALYPTUS CANADENSIS	GUM TREE	18"	50'	45'	REMOVE, STUMP GRIND
80	EUCALYPTUS CANADENSIS	GUM TREE	18"	60'	30'	REMOVE, STUMP GRIND
81	EUCALYPTUS CANADENSIS	GUM TREE	16"	45'	35'	REMOVE, STUMP GRIND
82	ERYTHRINA CAFFRA	CORAL TREE	32"	25'	25'	REMOVE, STUMP GRIND
83	ERYTHRINA CAFFRA	CORAL TREE	48"	25'	25'	REMOVE, STUMP GRIND
84	ERYTHRINA CAFFRA	CORAL TREE	40"	25'	22'	REMOVE, STUMP GRIND
85	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	22"	70'	15'	REMOVE, STUMP GRIND
86	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	18"	70'	15'	REMOVE, STUMP GRIND
87	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	8"	25'	30'	REMOVE, STUMP GRIND
88	FICUS MACROPHYLLA	MORETON BAY FIG	32"	30'	30'	REMOVE, STUMP GRIND
89	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	20"	15'	15'	REMOVE, STUMP GRIND
90	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	6"	12'	10'	REMOVE, STUMP GRIND
91	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	13"	12'	15'	REMOVE, STUMP GRIND
92	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	6"	18'	8'	REMOVE, STUMP GRIND
93	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	17"	20'	20'	REMOVE, STUMP GRIND
94	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	6"	15'	6'	REMOVE, STUMP GRIND
95	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	15"	40'	30'	REMOVE, STUMP GRIND
96	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	10"	25'	15'	REMOVE, STUMP GRIND
97	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	8"	15'	15'	REMOVE, STUMP GRIND
98	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	6"	15'	10'	REMOVE, STUMP GRIND
99	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	24"	40'	35'	REMOVE, STUMP GRIND
100	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	8"	16'	10'	REMOVE, STUMP GRIND
101	EUCALYPTUS CANADENSIS	GUM TREE	30"	45'	25'	REMOVE, STUMP GRIND
102	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	8"	20'	15'	REMOVE, STUMP GRIND
103	EUCALYPTUS CANADENSIS	GUM TREE	18"	40'	30'	REMOVE, STUMP GRIND
104	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	10"	25'	15'	REMOVE, STUMP GRIND
105	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	18"	30'	30'	REMOVE, STUMP GRIND
106	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	30"	20'	20'	REMOVE, STUMP GRIND
107	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	18"	12'	15'	REMOVE, STUMP GRIND
108	CALLISTEMON CITRINUS	CRIMSON BOTTLEBRUSH	24"	35'	20'	REMOVE, STUMP GRIND
109	TRISTINIA CONFERTA	BRISBANE BOX	8"	20'	10'	REMOVE, STUMP GRIND
110	TRISTINIA CONFERTA	BRISBANE BOX	3"	12'	4'	REMOVE, STUMP GRIND
111	TRISTINIA CONFERTA	BRISBANE BOX	4"	10'	8'	REMOVE, STUMP GRIND
112	TRISTINIA CONFERTA	BRISBANE BOX	4"	10'	8'	REMOVE, STUMP GRIND
113	TRISTINIA CONFERTA	BRISBANE BOX	4"	10"	6'	REMOVE, STUMP GRIND
114	FRAXINUS SPP.	ASH TREE	9"	15'	18'	REMOVE, STUMP GRIND
115	EUCALYPTUS CANADENSIS	GUM TREE	16"	45'	30'	REMOVE, STUMP GRIND
116	EUCALYPTUS CANADENSIS	GUM TREE	18"	50'	40'	REMOVE, STUMP GRIND
117	SCHINUS TEREBINTHIFOLIUS	BRAZILIAN PEPPER TREE	12"	30'	25'	REMOVE, STUMP GRIND
118	TRISTINIA CONFERTA	BRISBANE BOX	8"	20'	6'	PROTECT IN PLACE
119	TIPUANA TIPU	TIPU TREE	16"	30'	30'	PROTECT IN PLACE



FOR SCHEDULE OF TREE
REPLACEMENT SEE SHEET L-9

LICENSED LANDSCAPE ARCHITECT
Signature
Ren Date
Date
STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

20180529 BIDSET

L-5

SHEET 5 | CITY OF OCEANSIDE ENGINEERING DIVISION | 16 SHEETS

EXISTING TREE SURVEY

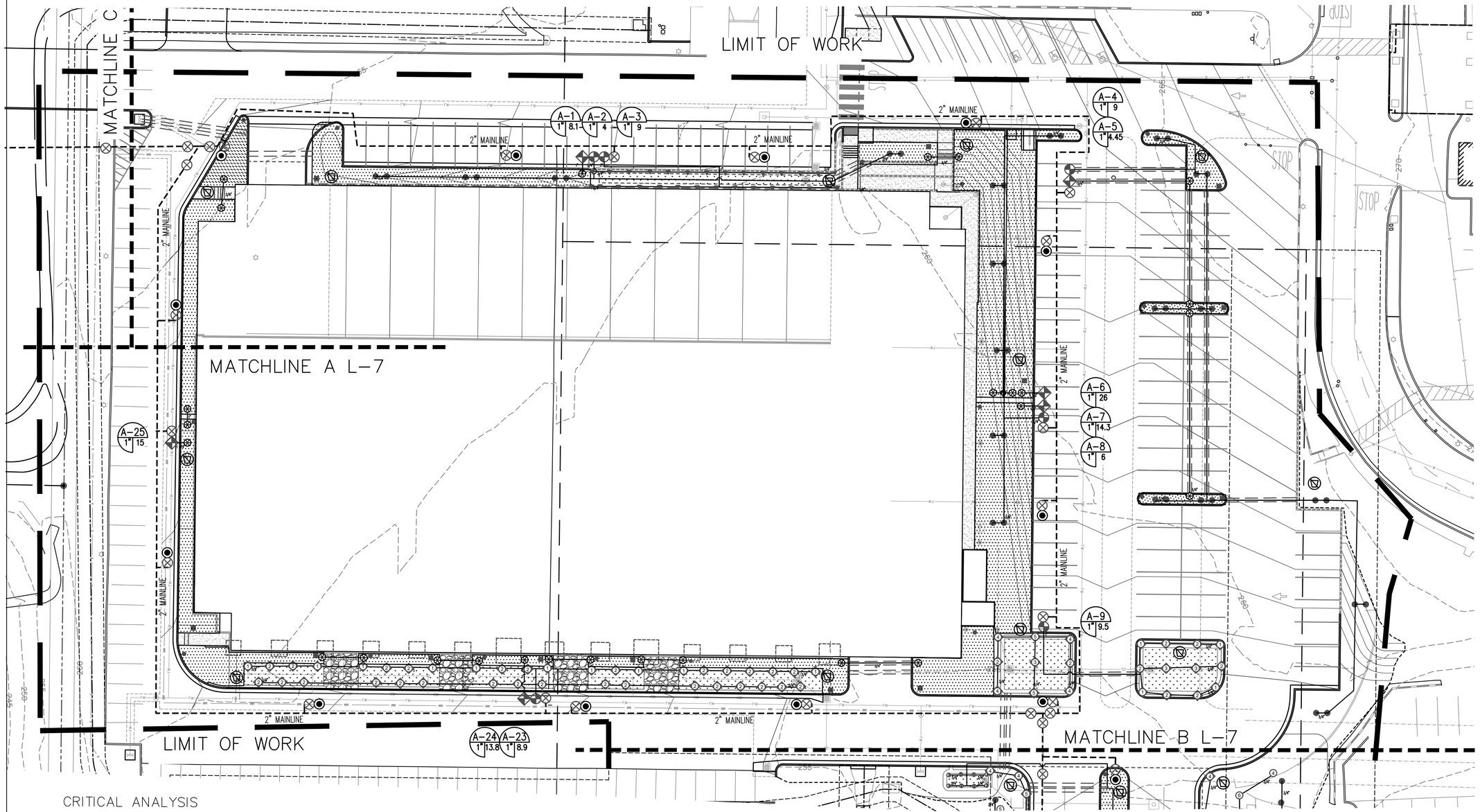
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:

PLAN NUMBER L18-00001



CRITICAL ANALYSIS

STATION NO.:		A-26
STATIC WATER PRESSURE:	108 PSI	
TYPE OF PIPE: CL 315 PVC & CL 200 PVC		
PRESSURE LOSS THROUGH COMPONENTS		
SPRINKLER NOZZLE		35 PSI
CONTROL VALVE		2.2 PSI
BACKFLOW PREVENTER	11.0 PSI	
WATER METER		2.0 PSI
	TOTAL	50.2 PSI
PIPE FITTINGS		2.0 PSI
ELEVATION DIFFERENCE 10' (.433)=		−4.33 PSI
BALL VALVES		2.0 PSI
	TOTAL	−0.33 PSI
TOTAL PRESSURE LOSS THROUGH COMPONENTS		49.9 PSI
PRESSURE LOSS THROUGH MAINLINE PIPE		
TYPE OF PIPE: CLASS 315 PVC		
488' OF 2" @ 26 GPM	0.64/100'=0.0064	
TOTAL LOSS THROUGH MAINLINE PIPE		3.12 PSI
PRESSURE LOSS THROUGH LATERAL PIPE		
TYPE OF PIPE: CLASS 200 PVC		
10' OF 3/4" @ 0.6 GPM	0.08/100'=0.0008	
5' OF 1 1/4" @ 25.4 GPM	3.53/100'=0.0353	0.17 PSI
TOTAL LOSS THROUGH LATERAL PIPE		0.17 PSI
TOTAL LOSS THROUGH SYSTEM		50.07 PSI
AVAILABLE PRESSURE		57.3 PSI

POC FOR CONTROLLER 'A'

EX. METER LOCATION:	WEST SIDE OF DRIVE ENTRY AT VISTA WAY
METER ELEVATION:	230'
METER SIZE:	2"
STATIC PSI:	108 +/-

LICENSED LANDSCAPE ARCHITECT — Signature — Ren Date — Date — STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

N
20 10 0 20 40 60
SCALE: 1"=20'-0"

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

L-6

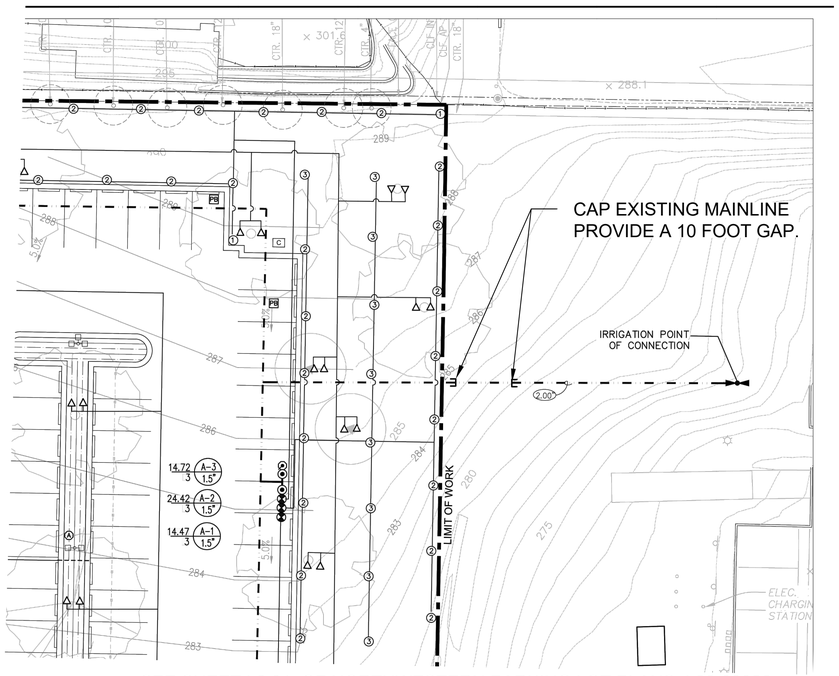
SHEET 6	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

IRRIGATION PLAN
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

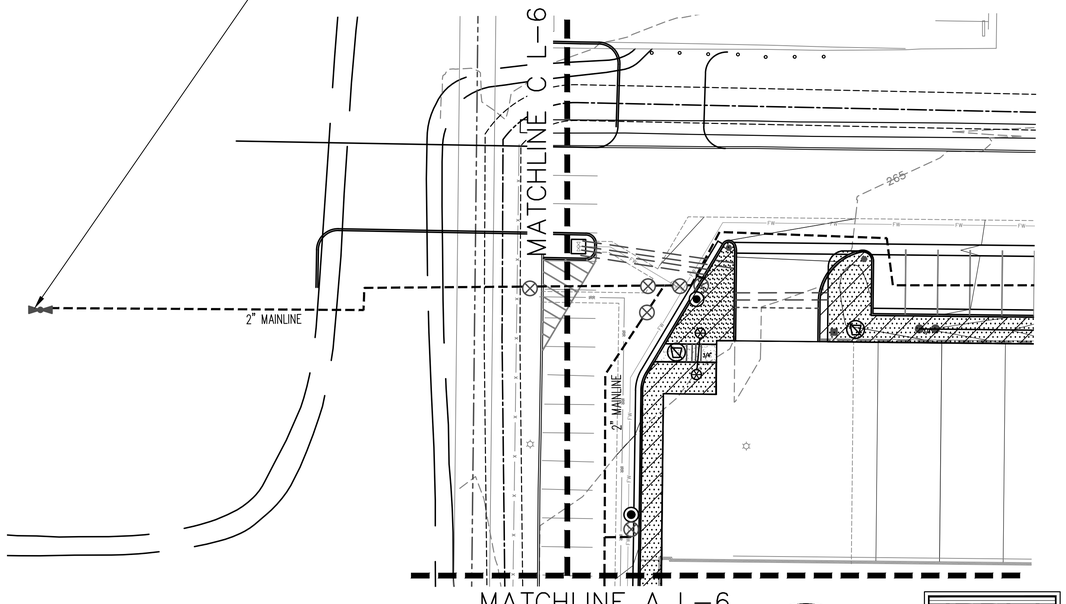
LANDSCAPE ARCHITECT OF WORK	Checked By:	PLAN NUMBER
JAMES P. BENEDETTI R.L.A. #3058	Approval Date:	L18-00001

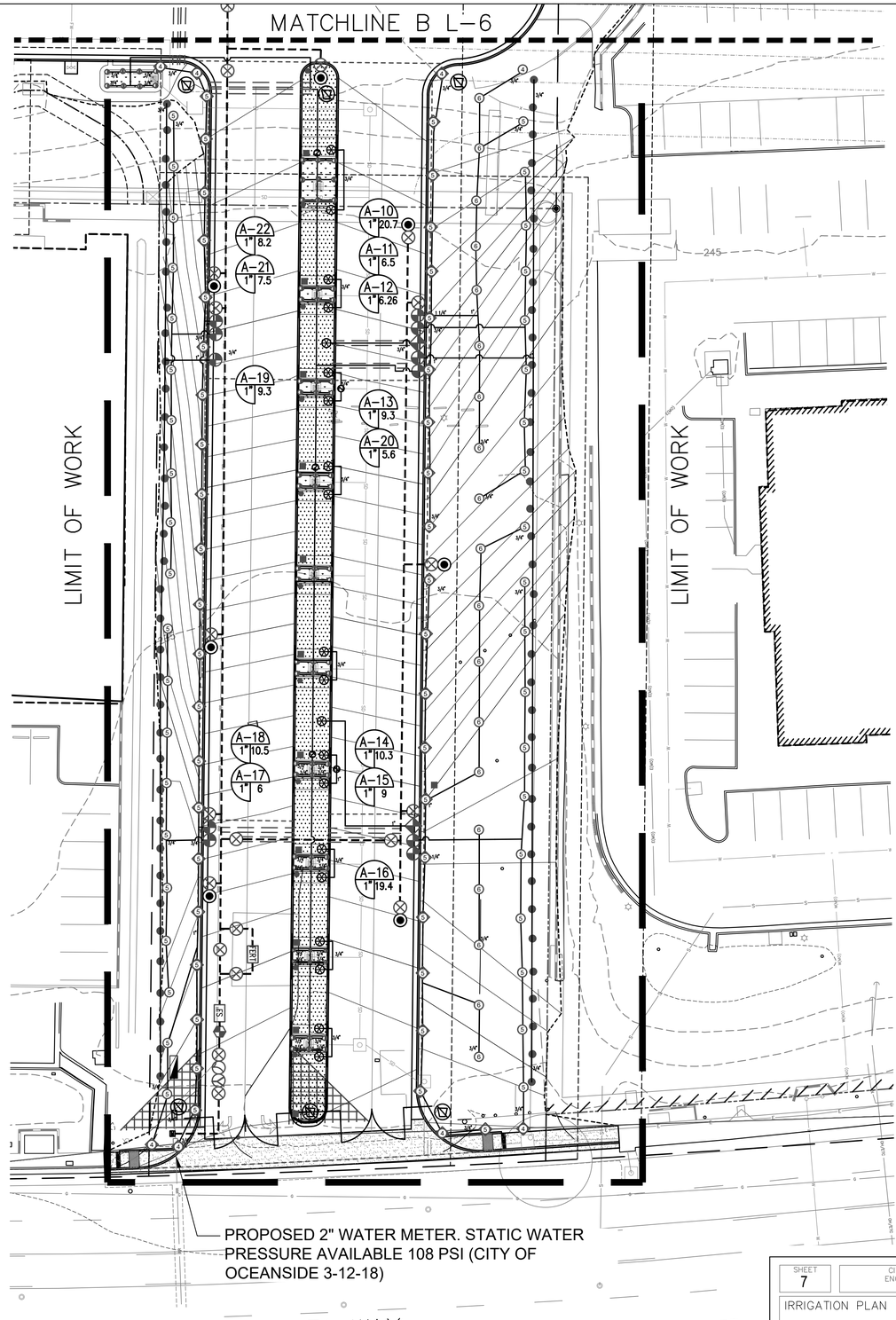
20180529 BIDSET



SEE SHEET L2.01 OF NORTHWESTERN PARKING LOT PLANS. L26-00026

POINT OF CONNECTION TO EXISTING MAINLINE
(SEE TCMC NORTH WESTERN PARKING LOT CITY
OF OCEANSIDE PLAN # L2.02. L26-00026)





20180529 BIDSET

L-7

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

LICENSED LANDSCAPE ARCHITECT
Signature
Ren Date
Date
STATE OF CALIFORNIA

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

N
20 10 0 20 40 60
SCALE: 1"=20'-0"

APPROVED CHANGES:

NO.	DESCRIPTION	APP'D	DATE

SHEET 7	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

IRRIGATION PLAN
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:

PLAN NUMBER
L18-00001

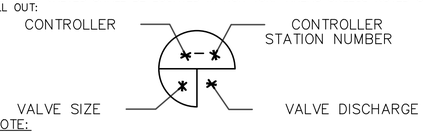
IRRIGATION LEGEND

SYMBOL 1/4	1/3	1/2	F	DESCRIPTION	MANUFACTURER/MODEL	RAD	PSI	1/4	1/3	1/2	F	DETAIL
◇1	◇2	◇3		ROTOR POP-UP	HUNTER / PRO-PRS-40-12-CV-R W/ MP1000	14'	40	0.19	---	0.37	0.75	N/L-10
◇4	◇5	◇6		ROTOR POP-UP	HUNTER / PRO-PRS-40-12-CV-R W/ MP2000	19'	40	0.40	---	0.74	1.47	
◇7	◇8	◇9		ROTOR POP-UP	HUNTER / PRO-PRS-40-12-CV-R W/ MP3000	30'	40	0.86	---	1.82	3.64	
◇12	◇13	◇14		ROTOR POP-UP	HUNTER / PRO-PRS-40-12-CV-R W/ MP800SR	10'	40	0.83	---	0.42	0.78	
①1	①2	①3		ROTOR ON RISER	HUNTER / PRO-PRS-40-12-CV-R W/ MP1000	14'	40	0.19	---	0.37	0.75	M/L-10
①4	①5	①6		ROTOR ON RISER	HUNTER / PRO-PRS-40-12-CV-R W/ MP2000	19'	40	0.40	---	0.74	1.47	
①7	①8	①9		ROTOR ON RISER	HUNTER / PRO-PRS-40-12-CV-R W/ MP3000	30'	40	0.86	---	1.82	3.64	
①12	①13	①14		ROTOR ON RISER	HUNTER / PRO-PRS-40-12-CV-R W/ MP800SR	10'	40	0.83	---	0.42	0.78	
◑	◐	◎		POP-UP	HUNTER / PRO-PRS-30-06-CV-R W/ TORO PRECISION 0-X-5-XXX SERIES NOZZLE	5'	30	.064	---	0.13	0.26	N/L-10
▼	▼	⋈		POP-UP	HUNTER / PRO-PRS-30-06 CV-R W/ TORO PRECISION 0-X-8-XXX SERIES NOZZLE	8'	30	0.17	---	0.33	0.66	
◑	◓	○		POP-UP	HUNTER / PRO-PRS-30-06-CV-R W/ TORO PRECISION 0-X-10-XXX SERIES NOZZLE	10'	30	0.23	0.34	0.51	1.03	
▼	▼	▽	⋈	POP-UP	HUNTER / PRO-PRS-30-06 CV-R W/ TORO PRECISION 0-X-12-XXX SERIES NOZZLE	12'	30	0.39	0.49	0.74	1.48	
▼	▼	▽	⋈	POP-UP	HUNTER /PRO-PRS-30-06 CV-R W/ TORO PRECISION 0-X-15-XXX SERIES NOZZLE	15'	30	0.58	0.77	1.16	2.31	
		●			HUNTER / RZWS-18-25-CV-R TREE BUBBLER	N/A	30	---	---	---	0.25	D/L-8
[redacted]				DRIPPER LINE 18" SPACING	NETAFIM "TECHLINE CV" / HCVXR18-RW LATERAL ROW SPACING TO BE 18". ALL TUBING SHALL BE INSTALLED 3" MINIMUM BELOW FINISH GRADE W / 9" WIRE STAKES AT (3) FEET O.C. VERIFY LAYOUT AND SPACING IN FIELD PRIOR TO STARTING WORK.	N/A	7 -70				0.53	H/L-10

SYMBOL	DESCRIPTION	MANUFACTURER/MODEL	REMARKS	DETAIL
M	1-1/2" NEW WATER METER		VERIFY SIZE IN FIELD	–
⊗⊗⊗	BACKFLOW PREVENTOR	FEBCO / 825YA-1.25 W/ PVR-1	INSTALL DETAIL CITY STANDARD W-12 INSTALL IN STRONG BOX STAINLESS STEEL ENCLOSURE	D/L-10 C,B/L-15
FERT	LIQUID FERTILIZATION TANK	EZ-FLO / EZ001-CX W/ CBV-125 (BALL VALVE)	INSTALL PER DETAIL (SIZE PER SYSTEMS)	–
	EX./MODIFIED AUTOMATIC CONTROLLER	HUNTER/ ACC2 DECODER AC2-WIFI/ROAM-XL-KIT/ICD-HP HUNTER/ DECODER/ ICD-100 OR ICD-200	ADDITIONAL COMPONENTS TO BE ADDED TO THE EXISTING IRRIGATION CONTROLLER. SELECT DECODER PER MANIFOLD SIZE BUT MAX SIZE DECODER 2 STATIONS, GROUND WIRING PER MANUF. RECOMMENDATIONS.	K/L-10
FS	HIGH FLOW SHUTOFF DEVICE	HUNTER / FLOW-CLIK-FCT-158 W/ ICD-SEN FLOW SENSOR DECODER	INSTALL (1) PER MANUF. RECOMM,	B/L-8
◉	QUICK COUPLER VALVE	RAINBIRD / 44NP (PURPLE LOCKING COVER)	1" SIZE ACME THREAD	C/L-8
⊗	BALL VALVE	NIBCO / MODEL D, SIZE PER LINE	INLINE SIZE\ BLOCKED TRUE UNION SEE SPEC.	E/L-10
	VALVE BOX	CARSON/1015-12 PURPLE RWDNDES (PURPLE LID)		
	REMOTE CONTROL VALVE	RAINBIRD / PESB-R	SIZE AS SHOWN	F/L-10
	DRIP REMOTE CONTROL VALVE ASSEMBLY	RAINBIRD / XCZ-100-PRB-COM FOR FLOWS 15-40 GPM RAINBIRD / XCZ-100-PRBR-COM FOR FLOWS 4-20 GPM RAINBIRD / XCZ-100-PRBR-LC FOR FLOWS 1-4 GPM	SIZE AS SHOWN	G/L-10
	MASTER CONTROL VALVE	GRISWAOLD / 2160 (PURPLE HANDLE)	INSTALL PER DETAIL	B/L-8
■	DRIP LATERAL END FLUSH	NETAFIM / TL050MFV-1 (PURPLE LID)	INSTALL PER DETAIL	J/L-10
⬢	DRIP AIR RELEASE VALVE	NETIFIM / 3/4" MPT (PURPLE LID)	INSTALL PER DETAIL	L/L-10
⊛	DRIP/LATERAL CONNECTION	NETIFIM / TLFV-1 HUNTER / MDCF FITTINGS FOR CONNECTION BETWEEN PVC LATERAL HEADER LINES AND DRIP TUBING	INSTALL PER DETAIL	I/L-10
	CONTROL WIRE-14 GAUGE	PAIGE / #14 GAUGE	SEE SPEC.	B/L-10
▬ ▬ ▬	RECYCLED WATER MAINLINE	SCH 40 FOR 1-1/2' AND SMALLER (PURPLE) CLASS 315 FOR 2" AND LARGER (PURPLE)	1"- 1 1/2" = SCH 40; 2"-2 1/2"+ = CLASS 315, SEE SPECS.	C/L-10
———	LATERAL LINE (PVC PIPE)	SCH. 40 PVC (PURPLE)	SEE SPECS.	
- - - - -	SLEEVE (PVC PIPE)	SCH.80 PVC SLEEVE @ VEHICULAR PAVING SCH. 40 PVC SLEEVE @ ELSEWHERE	2 X OUTSIDE DIA. OF PIPE TO BE SLEEVED	
⊘	IN LINE CHECK VALVE	NETAFIM 1/2" MPT	INSTALL PER MANUF. RECOMM	–
	DO NOT DRINK SIGN	–	INSTALL PER MANUF. RECOMM	O/L-10
	IRRIGATION CAP			

IRRIGATION NOTES:

1. CONTRACTOR SHALL VERIFY STATIC WATER PRESSURE AT POINT OF CONNECTION PRIOR TO INSTALLING IRRIGATION SYSTEM. SHOULD STATIC WATER PRESSURE BE LESS THAN 65 PSI, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR INSTRUCTIONS PRIOR TO PRECEDING WITH INSTALLATION.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF AUTOMATIC CONTROLLERS EXISTING MAINS, LATERALS, SLEEVES AND CONTROL WIRING STUBOUTS PRIOR TO CONSTRUCTION.
3. MAINLINE AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY.
4. CONTRACTOR SHALL SAVE EXISTING IRRIGATION LATERAL LINES WHERE APPROPRIATE, AND SHALL PRESSURE TEST THESE LINES PER THE SPECIFICATIONS.
5. REMOTE CONTROL VALVES SHALL BE LOCATED IN NON TURF AREAS UNLESS NOTED OTHERWISE.
6 VALVE CALL OUT:



IRRIGATION NOTE:

ALL PLANTING AREAS SHALL BE IRRIGATED ACCORDING TO PLANT TYPE AND ENVIRONMENTAL EXPOSURE. ALL IRRIGATED AREAS SHALL RECEIVE UNIFORM COVERAGE BY MEANS OF AN AUTOMATICALLY CONTROLLED, ELECTRICALLY ACTIVATED UNDERGROUND PIPED IRRIGATION SYSTEM FOR WATER CONSERVATION AND TO MINIMIZE EROSION. STATE OF THE ART AUTOMATIC CONTROLLER WITH MASTER VALVE AND RAIN SHUTOFF CAPABILITIES. A REDUCED PRESSURE BACKFLOW PREVENTER WILL BE USED IN ACCORDANCE WITH LOCAL AND REGIONAL STANDARDS. REMOTE CONTROL VALVES SHALL BE UTILIZED WITH LOW PRECIPITATION HEADS FOR REDUCED WATER CONSUMPTION. PRESSURE COMPENSATING DRIP AND LOW PRECIPITATION RATE EQUIPMENT SHALL BE USED WHERE APPLICABLE. ALL PRESSURIZED MAINLINE AND LATERAL LINES WILL BE PVC INSTALLED BELOW GRADE PER LOCAL AND REGIONAL STANDARDS. AN AUTOMATIC, WATER EFFICIENT IRRIGATION SYSTEM SHALL BE PROVIDED TO ESTABLISH AND MAINTAIN LANDSCAPING.

FIELD ADJUST ALL SPRINKLERS TO ELIMINATE OVERSPRAY ONTO SIDEWALKS OR DRIVEWAYS.

PRESSURE REGULATOR REQUIRED AT POINT OF CONNECTION (S) IF STATIC PRESSURE AT WATER METER IS 80 P.S.I. OR GREATER.

GENERAL IRRIGATION NOTES:

ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.

THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.

THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.

THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.

ACTUAL LOCATION FOR THE INSTALLATION OF THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

IRRIGATION NOTE:

THE ENTIRE SPRINKLER SYSTEM SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP, INCLUDING SETTLING OF BACKFILLED AREAS AND TRENCHES FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK.

SHOULD ANY OPERATIONAL DIFFICULTIES IN CONNECTION WITH THE SPRINKLER SYSTEM DEVELOP WITHIN THE SPECIFIED GUARANTEE PERIOD, WHICH IN THE OPINION OF THE OWNER MAY BE DUE TO INFERIOR MATERIAL AND/OR WORKMANSHIP, SAID DIFFICULTIES SHALL BE IMMEDIATELY CORRECTED BY THE LANDSCAPE CONTRACTOR TO THE SATISFACTION OF THE OWNER, AT NO ADDITIONAL COST.

INSTALLATION NOTES:

1. ALL LANDSCAPE AND IRRIGATION SHALL BE DEVELOPED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE THE COUNTY OF SAN DIEGO.
2. IF ANY HARDSCAPE OR LANDSCAPE INDICATED ON THE APPROVED PLANS IS DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED OR REPLACED IN KIND WITH EQUIVALENT SIZE PER THE APPROVED PLANS.
3. TREES AND SHRUBS SHALL BE LOCATED AND MAINTAINED TO PRESERVE A CLEAR ZONE OF AT LEAST TEN FEET FROM FIRE HYDRANTS, OVERHEAD UTILITY WIRES, STREET LIGHT LUMINARIES AND ABOVE GROUND UTILITY STRUCTURES SUCH AS TRANSFORMER ENCLOSURES.
4. TREES SHALL BE PLANTED AT LEAST FIVE FEET FROM ANY UNDERGROUND UTILITY SUCH AS SEWER, GAS, ELECTRIC AND TELEPHONE. RIPARIAN TREE SPECIES SHALL BE PLANTED AT LEAST 30 FEET FROM SEWER, WATER AND DRAINLINES.
5. PROVIDE ROOT BARRIERS FOR TEN FEET TO BOTH SIDES OF ALL STREET TREES WITH IN FIVE FEET OF ANY HARDSCAPE PAVING.
6. CONTRACTOR IS TO PROVIDE AN ADDITIONAL PILOT WIRE FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT BOTH ENDS.
7. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
8. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
9. THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. SWEENEY AND ASSOCIATES RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.

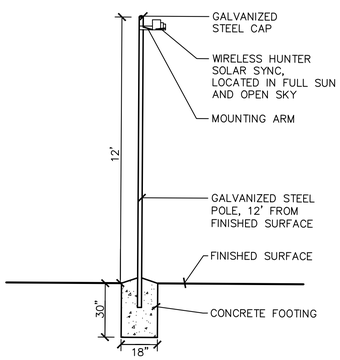
IRRIGATION PIPE SIZING CHART

LATERAL PIPE (PVC SCH. 40 IPS PIPE) PIPE SIZE	GPM	MAINLINE PIPE PIPE SIZE	GPM
3/4"	0-8	3/4" (SCH. 40 IPS PLASTIC PIPE)	0-8
1"	8-12	1" (SCH. 40 IPS PLASTIC PIPE)	8-12
1 1/4"	12-22	1 1/4" (SCH. 40 IPS PLASTIC PIPE)	12-22
1 1/2"	22-30	1 1/2" (SCH. 40 IPS PLASTIC PIPE)	22-30
2"	30-50	2" (PVC CLASS 315 IPS PLASTIC PIPE)	30-55
2 1/2"	50-70	2 1/2" (PVC CLASS 315 IPS PLASTIC PIPE)	55-70
3"	70-110	3" (PVC CLASS 315 IPS PLASTIC PIPE)	70-100

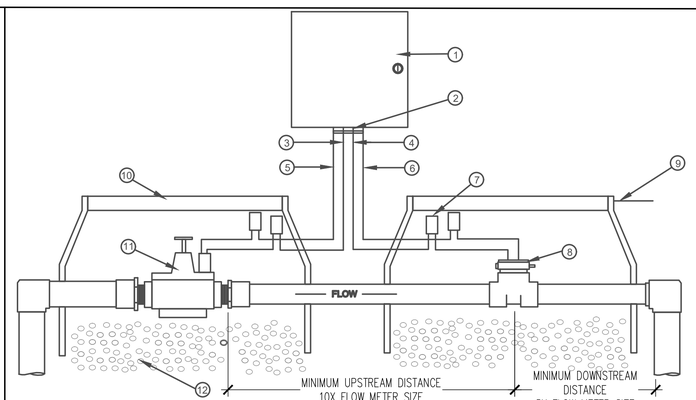
DRIP IRRIGATION NOTES

SUBSURFACE DRIP IRRIGATION INSTALLATION GUIDELINES:
1. THE TYPICAL RECOMMENDED PIPE DEPTH FOR THE DRIPLINE IS 4" BELOW FINISH GRADE.
2. FOR TURF AREAS WHERE AERIFICATION IS A PART OF NORMAL MAINTENANCE OPERATIONS, TUBING MUST BE BURIED BELOW THE REACH OF AERIFICATION EQUIPMENT.
3. USE NETAFIM SERIES COMPRESSION FITTINGS FOR ALL DRIPLINE CONNECTIONS TO ENSURE THE INTEGRITY OF THE CONNECTION.
4. IT IS IMPERATIVE THAT NETAFIM DRIPLINE IS INSTALLED AT A UNIFORM DEPTH AND WITH ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
5. COMMERCIAL, HOMEOWNER ASSOCIATION OR OTHER EXTENSIVE DRIP IRRIGATION SYSTEMS SHALL BE PROVIDED WITH POP-UP INDICATOR VALVES FOR EACH DRIP VALVE.

DRIPLINE CAN BE INSTALLED USING ONE OF THE FOLLOWING METHODS:
1. HAND TRENCHING OR BACKFILLING: THE ADVANTAGES TO THIS METHODS ARE; A) HANDLES SERVER SLOPES CONFINED AREAS, B) UNIFORM DEPTH.
2. OSCILLATING O VIBRATING PLOW (CABLE OR PIPE PULLING TYPE). ADVANTAGES TO THIS METHODS ARE; A) FAST IN SMALL TO MEDIUM INSTALLATIONS, B) MINIMAL GROUND DISTURBANCE, C) NO NEED TO BACKFILL THE TRENCH.
3. TRENCHING MACHINE. THE ADVANTAGES TO THIS METHODS ARE; A)FASTER THAN HAND TRENCHING, B) MAY USE 1" BLADE FOR MOST INSTALLATIONS, C) UNIFORM DEPTH.
4. TRACTOR-MOUNTED 3-POINT HITCH INSERTION IMPLEMENT. THE ADVANTAGES TO THIS METHODS ARE; A) FASTEST METHOD UP TO FOUR LOW ATTACHMENTS WITH REELS, B) PACKER ROLLER COMPACTS SOIL OVER PIPE.

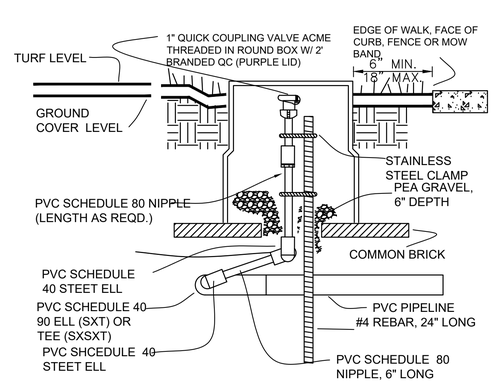


Ⓐ POLE MOUNTED SOLAR SYNC



1. CONTROLLER (PER LEGEND)
2. BLACK WIRE HARNESS
3. BLUE WIRE
4. RED WIRE
5. WHITE WIRE
6. BLACK WIRE
7. WATERPROOF ELECTRICAL CONNECTORS
8. HUNTER FLOW SENSOR FLOW-CLIK-FCT-158
9. FINISH GRADE
10. RECTANGULAR VALVE BOX
11. MASTER VALVE
12. PEA GRAVEL – 6"-8" MIN IN VALVE BOX

Ⓑ FLOW SENSOR/MASTER CONTROL VALVE

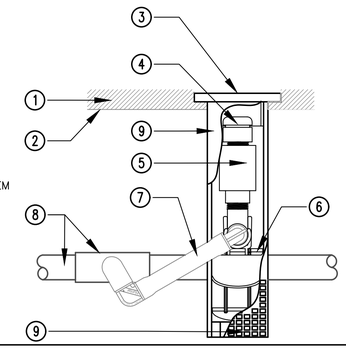


QUICK COUPLER VALVES SHALL BE OF A TYPE APPROVED FOR RECYCLED WATER USE.

Ⓒ QUICK COUPLER

1. MULCH
2. FINISH GRADE
3. GRATED CAP
4. HUNTER PCB BUBBLER (OPTIONAL)
5. HUNTER HCV CHECK VALVE (OPTIONAL)
6. PATENTED STRATA ROOT SYSTEM
7. HUNTER SWING JOINT (OPTIONAL)
8. LATERAL TEE OR ELL/PIPE
9. ROOT INTRUSION BARRIER

NOTE: INSTALL HUNTER FILTER FABRIC SLEEVE– #RZWS-SLEEVE



Ⓓ TREE BUBBLER

L-8

LICENSED LANDSCAPE ARCHITECT
Signature
Ren Date
Date
STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 8	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

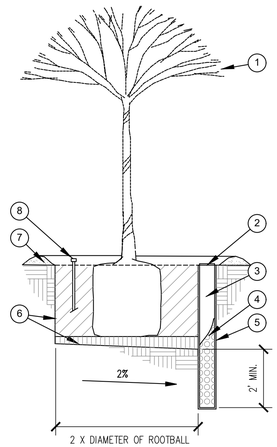
IRRIGATION LEGEND & NOTES

TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK	Checked By:	PLAN NUMBER
JAMES P. BENEDETTI R.L.A. #3058	Approval Date:	L18-00001

20180529 BIDSET

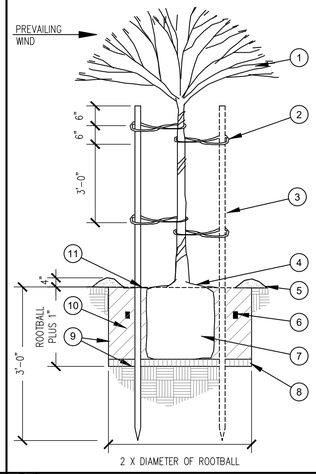


LEGEND

1. TREE
2. 4" DIA. NDS FLAT DRAIN GRATE, COLOR GREEN, SNUG FIT, DO NOT GLUE. LOCATE TO AVOID RUN-OFF INTO STANDPIPE.
3. FILTER FABRIC WRAPPED AROUND ENTIRE LENGTH OF THE PERFORATED PIPE, TIE WITH PLASTIC TIES @ 18" OC
4. 4" ABS PERFORATED RIGID PIPE W/ 1/2" DIA. HOLES @ 3" OC.
5. NATIVE SOIL IN 12" DIA. AUGER HOLE (SURROUNDING THE PIPE).
6. TREE PLANTING, REFER TO TREE PLANTING/STAKING DETAIL
7. WATER BASIN
8. IRRIGATION BUBBLER TO BE LOCATED DIRECTLY OPPOSITE OF STANDPIPE

NOTE:
REFER TO PLANTING LEGEND FOR STANDPIPE DRAIN LOCATIONS.

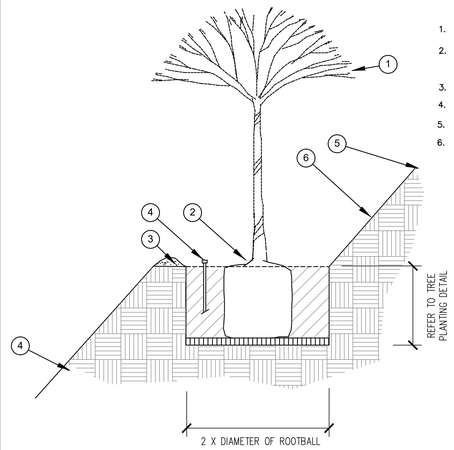
Ⓐ STANDPIPE DRAIN N.T.S.



LEGEND

1. TREE (REFER TO PLANTING LEGEND FOR STAKING SCHEDULE)
2. 36" CORDED TIE, ATTACH TO POST W/2 ROOFING NAIL
3. 2" DIA. X 10'-0", LODGE POLE PINE STAKE, KEEP OFF ROOTBALL
4. SET CROWN OF ROOTBALL 1-1/2" ABOVE SURROUNDING GRADE AND SLOPE SOIL AWAY FROM TRUNK
5. WATER BASIN
6. SLOW RELEASE FERTILIZER TABLET
7. ROOTBALL - SCARIFY SIDES AND BOTTOM
8. AMENDED BACKFILL COMPACTED TO EXISTING SOIL
9. PLANTING PIT - SCARIFY SIDES AND BOTTOM
10. AMENDED BACKFILL PER SPECIFICATIONS
11. FINISH GRADE WITH 2" OF MULCH ATOP

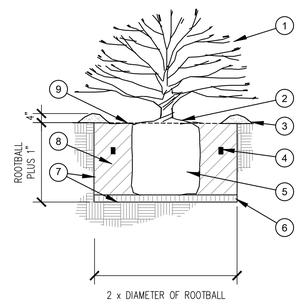
Ⓑ TREE STAKING/PLANTING N.T.S.



LEGEND

1. TREE
2. PLANTING PREPARATION AND STAKING, REFER TO TREE PLANTING/STAKING DETAIL.
3. WATER BASIN
4. IRRIGATION BUBBLER
5. EXISTING SLOPE
6. STABILIZE SLOPE TO ACCOMMODATE THE PLANTING PIT FOR THE TREE. TO MINIMIZE SLOPE CUT, CUT/FILL ABOVE AND BELOW TREE LOCATION. CHAMFER AS NEEDED TO ELIMINATE SLUFFING.

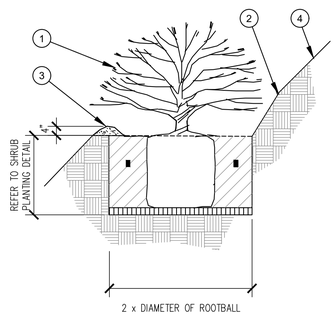
Ⓒ TREE SLOPE PLANTING N.T.S.



LEGEND

1. SHRUB
2. SET CROWN OF ROOTBALL 1-1/2" ABOVE SURROUNDING GRADE AND SLOPE SOIL AWAY FROM TRUNK.
3. WATER BASIN
4. SLOW RELEASE FERTILIZER TABLET
5. ROOTBALL - SCARIFY SIDES AND BOTTOM
6. AMENDED BACKFILL COMPACTED TO EXISITING SOIL
7. PLANTING PIT - SCARIFY SIDES AND BOTTOM
8. AMENDED BACKFILL PER SPECIFICATIONS
9. FINISH GRADE WITH 3" OF MULCH ATOP

Ⓓ SHRUB PLANTING N.T.S.



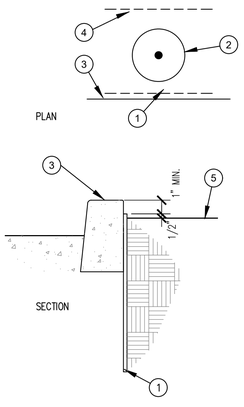
LEGEND

1. SHRUB
2. CHAMFER AS NEEDED TO ELIMINATE SOIL SLUFFING

WATER BASIN

3. EXISTING SLOPE
4. NOTE: REFER TO SHRUB PLANTING DETAIL FOR PLANTING PIT INFORMATION AND PREPARATION.

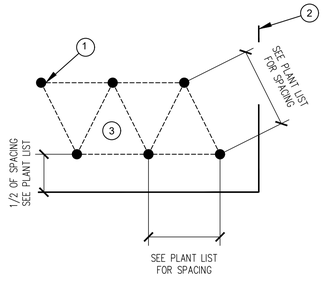
Ⓔ SHRUB SLOPE PLANTING N.T.S.



LEGEND

1. BIO-BARRIER 24" DEPTH MIN. (LINEAR APPLICATION INSTALLED PER MANUFACTURER'S SPECIFICATIONS).
2. TREE
3. CURB
4. ADD ROOT BARRIER (BIO-BARRIER) TO BOTH SIDES OF THE BAMBOO SCREEN
5. FINISH GRADE

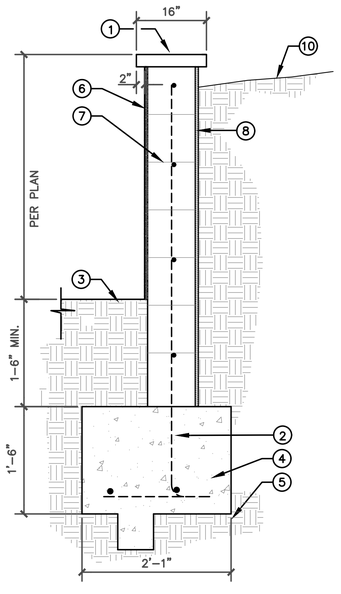
Ⓕ ROOT BARRIER N.T.S.



LEGEND

1. PLANT MATERIAL
2. EDGE OF CURB/FACE OF WALL
3. 3" DEPTH OF MULCH, SEE SPECIFICATIONS

Ⓖ GROUNDCOVER N.T.S.



1. PRE-CAST CONCRETE WALL CAP TO MATCH ARCHITECTURE
2. NO. 3 REBAR @ 16" O.C. BOTH WAYS, HOLD 3" CLEAR
3. FINISHED GRADE
4. CONCRETE FOOTING PER COUNTY OF SAN DIEGO STANDARD PDS-08
5. COMPACTED SUBGRADE PER SOILS REPORT
6. PAINT COLOR FINISH TO MATCH ARCHITECTURE
7. 8"x8"x16" CMU BLOCK WALL, GROUT ALL CELLS SOLID
8. ASPHALTIC WATERPROOFING

Ⓗ RETAINING WALL N.T.S.

SCHEDULE OF TREE REPLACEMENT:

EXISTING QUANTITIES OF TREES IMPACTED BY CONSTRUCTION:

SYMBOL	QTY	SPECIES	CALIPER	QTY X CALIPER TOTAL CALIPER IN.
1,11,19,44	4	PINUS RAIDIATA	22"	88"
2,15,21,23,2 5,34,35,43	8	PINUS RAIDIATA	20"	160"
3,32	2	PINUS RAIDIATA	17"	34"
6	1	PINUS RAIDIATA	23"	23"
7	1	PINUS RAIDIATA	25"	25"
8	1	PINUS RAIDIATA	19"	19"
9,17,29,36,4 1,33	6	PINUS RAIDIATA	24"	144"
10	1	PINUS RAIDIATA	26"	26"
12,22,40	3	PINUS RAIDIATA	30"	90"
13	1	PINUS RAIDIATA	14"	14"
14	1	PINUS RAIDIATA	16"	16"
16,20,24	3	PINUS RAIDIATA	18"	54"
18,30	2	PINUS RAIDIATA	21"	42"
26,31	2	PINUS RAIDIATA	15"	30"
28,37	2	PINUS RAIDIATA	27"	54"
38	1	PINUS RAIDIATA	34"	34"
39	1	PINUS RAIDIATA	36"	36"
42	1	PINUS RAIDIATA	28"	28"
76	1	EUCALYPTUS CANADENSIS	17"	17"
77,79,80,103	3	EUCALYPTUS CANADENSIS	18"	72"
78,81	2	EUCALYPTUS CANADENSIS	16"	36"
82	1	ERYTHRINA CAFFRA	32"	32"
83	1	ERYTHRINA CAFFRA	48"	48"
84	1	ERYTHRINA CAFFRA	40"	40"
88	1	FICUS MACROPHYLLA	32"	32"
89	1	CALLISTEMON CITRINUS	20"	20"
91	1	CALLISTEMON CITRINUS	13"	13"
93	1	CALLISTEMON CITRINUS	17"	17"
95	1	CALLISTEMON CITRINUS	15"	15"
96	1	CALLISTEMON CITRINUS	10"	10"
99	1	CALLISTEMON CITRINUS	24"	24"
101	1	EUCALYPTUS CANADENSIS	30"	30"
104	1	CALLISTEMON CITRINUS	10"	10"
105, 107	2	CALLISTEMON CITRINUS	18"	36"
106	1	CALLISTEMON CITRINUS	30"	30"
108	1	CALLISTEMON CITRINUS	24"	24"
115	1	EUCALYPTUS CANADENSIS	16"	16"
116	1	EUCALYPTUS CANADENSIS	18"	18"
117	1	SCHINUS TEREBINTHIFOLIUS	12"	12"

TOTAL TREE CALIPER INCHES SUBJECT TO (REQUIRED) MITIGATION 1,469"

SYMBOL	QTY	SPECIES	CALIPER	QTY X CALIPER TOTAL CALIPER IN.
85	1	WASHINGTONIA ROBUSTA	22"	22"
86	1	WASHINGTONIA ROBUSTA	18"	18"

TOTAL TREE CALIPER INCHES SUBJECT TO (REQUIRED) MITIGATION 40"

TREE MITIGATION SCHEDULE

QTY	SIZE	TREE TYPE	CALIPER ALLOWANCE/TREE	TOTAL CALIPER INCHES
65	5 GALLON	TREES	1" EACH	65"
25	15 GALLON	TREES	2" EACH	50"
9	24" BOX	TREES	3" EACH	27"
		TOTAL PROPOSED PROJECT TREE CALIPER INCHES FOR MITIGATION		**142"**

20180529 BIDSET

L-9

JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APP'D	DATE

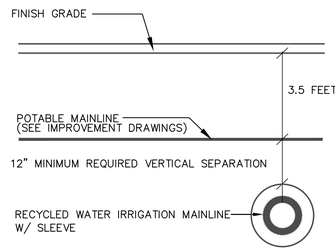
SHEET 9	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

PLANTING DETAILS
TRI CITY MEDICAL CENTER

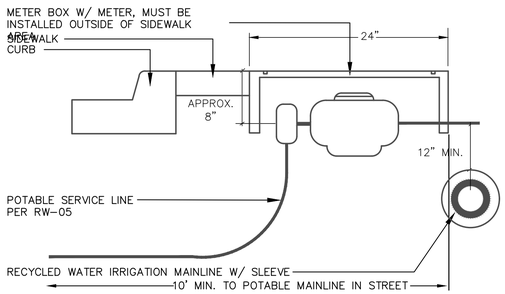
POINT OF CONTRACT - FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

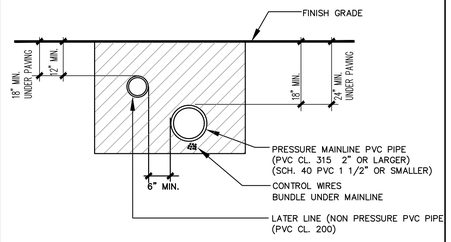
Checked By:
Approval Date:
PLAN NUMBER L18-00001



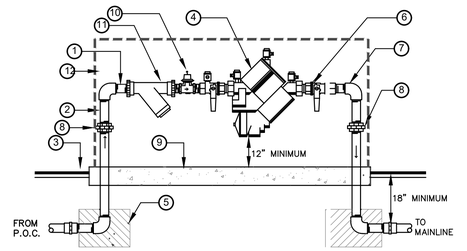
NOTE:
ALL RECYCLED WATER IRRIGATION PIPING AND SLEEVES SHALL BE PURPLE AND LABLED AS SPECIFIED IN:



NOTE:
VERTICAL CLEARANCE OF 12" MINIMUM IS MANDATORY WHEN CROSSING PATH OF A POTABLE WATER LINE. INSTALLATION OF RECYCLED WATER IRRIGATION MAINLINE 24" FROM FACE OF SIDEWALK WILL PROVIDE THE NECESSARY 10' HORIZONTAL CLEARANCE FROM POTABLE MAINLINE IN THE STREET.

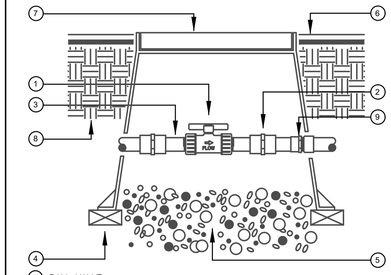


NOTES:
1. PROVIDE 2" OF CLEAN BACKFILL UNDER ALL PIPING
2. NO OTHER TRADES (ELECTRICAL, LIGHTING) ALLOWED IN SAME TRENCH AS IRRIGATION PIPE.
3. PROVIDE PVC SLEEVES FPR ALL WIRING AND PIPING UNDER PAVING.
4. NO STAKING (VERTICALLY) OF PIPES IN SAME TRENCH.



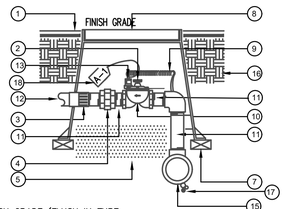
1. BRASS NIPPLES 4" MIN. (TYP)
2. BRASS RISERS LENGTH AS REQ.
3. FINISH GRADE
4. R/P DEVICE SEE LEGEND FOR SPECIFICATION
5. CONCRETE THRUST BLOCK (1 CU FT)
6. BRASS BALL VALVE (TYP)
7. BRASS ELL (TYP)
8. BRASS UNION
9. 4" CONCRETE PAD PER STD. BF-TI
10. PRESSURE REGULATOR
11. WYE STRAINER
12. ENCLOSURE

NOTE: PLEASE REFER TO RW-07 SHEET L-15



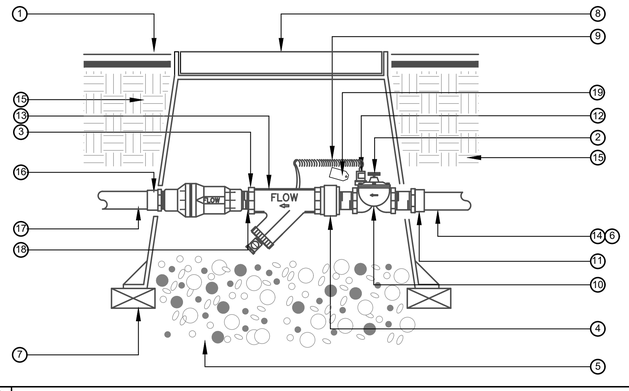
1. BALL VALVE
2. PVC SCH 80 UNION
3. SHORT PVC SCH. 80 NIPPLE (LENGTH AS REQ'D)
4. BRICK OR CONC. SUPPORTS ON COMPACTED SUBGRADE
5. 1 CU. FT. (MIN.) PEA GRAVEL SUMP
6. FINISH GRADE IN TURF 1" IN G.C.
7. VALVE BOX W/ 2" BRANDED BV PURPLE LID
8. COMPACTED SUBGRADE
9. PVC SCH 40 FEMALE ADAPTER (TYP.)

A POTABLE SERVICE LINE CROSSING



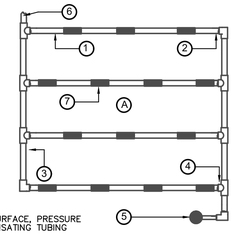
1. FINISH GRADE (FLUSH IN TURF 1" IN GROUNDCOVER)
2. REMOTE CONTROL VALVE (SEE SPECS)
3. FEMALE ADAP. SCH. 40 PVC
4. SCH. 80 UNION
5. 1 CU. FT. PEA GRAVEL
6. IRRIGATION WATER MAINLINE
7. BRICK SUPPORTS
8. PLASTIC VALVE BOX (12"LID)PURPLE LID HEAT 2" BRAND "RCV" & & CONTROLLER STATION NO. ONTO LID
9. CONTROL WIRES; BUNDLE AND TAPE (W/ 4' MIN. EXTRA WIRE)
10. CONTROL VALVE
11. SCH. 80 PVC NIPPLE (TYP.)
12. PVC NON-PRESSURE PIPE (SEE SPECS)
13. SOLENOID
14. PVC PRESSURE PIPE
15. PVC SCH 40 TEE (SSS) OR ELL (SS) ON MAINLINE
16. UNDISTURBED/COMPACTED SUBGRADE
17. WIRES BUNDLED UNDER MAINLINE TYP.
18. CHRITY'S ID TAG WITH STATION NO. RECYCLED WATER WARNING TAG

B POTABLE MAINLINE CROSSING



1. 1" IN GROUNDCOVER)
2. REMOTE CONTROL VALVE (SEE SPECS)
3. PVC FEMALE ADAPTER
4. SCH. 80 UNION
5. 1 CU. FT. PEA GRAVEL
6. IRRIGATION WATER MAINLINE
7. BRICK SUPPORTS
8. PLASTIC VALVE BOX (12", W/ LID) HEAT BRAND "RCV" ONTO PURPLE LID
9. CONTROL WIRES; BUNDLE AND TAPE (W/ 4' MIN. EXTRA WIRE)
10. CONTROL VALVE
11. PVC MALE ADAPTER
12. SOLENOID
13. TECHLINE DISC FILTER
14. PVC SCH 40 TEE (SSS) OR ELL (SS) ON MAINLINE
15. UNDISTURBED/COMPACTED SUBGRADE
16. PVC SCH 40 MALE ADAPTER
17. PVC LATERAL TO SPRINKLERS
18. PVC LATERAL FROM RCV
19. RECYCLED WATER WARNING TAG

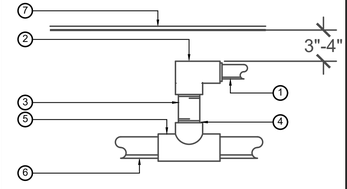
C TRENCHING



1. SUB-SURFACE, PRESSURE COMPENSATING TUBING
2. EMMISION POINT
3. PVC PIPING & FITTINGS
4. START CONNECTION (SEE DETAIL)
5. LINE FLUSHING VALVE IN SUMP BOX OFF OF PVC FOOTER (SEE DETAIL)
6. SOURCE (TO HEADER)
7. IN-LINE EMITTER SPACING PER LEGEND
A. EMISSION POINT SPACING; (SEE PLANS & LEGEND) TRIANGULAR EMITTER SPACING

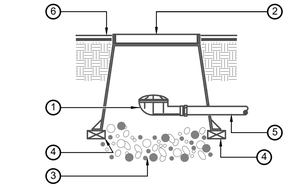
NOTE: DRIP TUBING / LATERAL SHALL BE LOCATED A MAXIMUM OF 2" - 4" FROM THE EDGE OF THE HARDSCAPE.

D BACKFLOW PREVENTOR



1. TECHLINE EMITTER TUBING. INSTALL 3-4" BELOW GRADE.
2. TECHLINE TUBING ELBOW
3. POLYETHYLENE TUBING
4. TECHLINE 3/4" MALE ADAPTER
5. PVC TEE (SxSxT)
6. PVC LATERAL HEADER OR FOOTER
7. FINISH GRADE

E BALL VALVE



1. DRIP LATERAL END FLUSH VALVE
2. ROUND PIT VALVE BOX (PUPRLE LID)
3. 1 CU. FT. MIN. PEA GRAVEL SUMP
4. BRICK SUPPORTS
5. PVC NON-PRESSURE LATERAL
6. 1" ABOVE FINISH GRADE

NOTE:
COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.

VALVE BOXES SHALL BE GROUPED TOGETHER WHERE POSSIBLE

VALVE BOX SHALL BE 12" MINIMUM FROM ALL PAVED AREAS, WALKS, OR BUILDINGS.

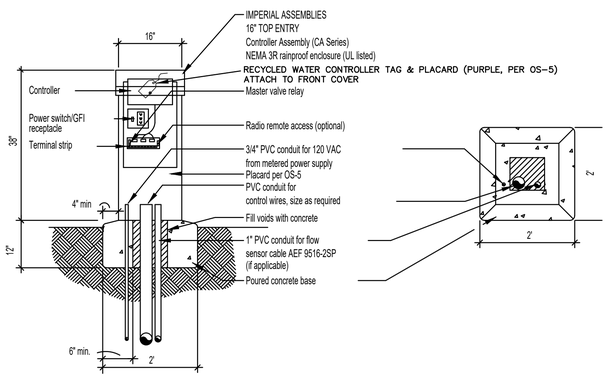
F REMOTE CONTROL VALVE N.T.S.

G DRIP REMOTE CONTROL ASSEMBLY

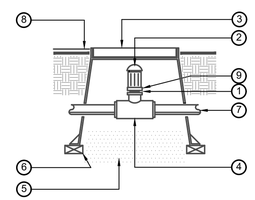
H SUB-SURF. DRIPLINE

I START CONNECTION

J LATERAL END FLUSH

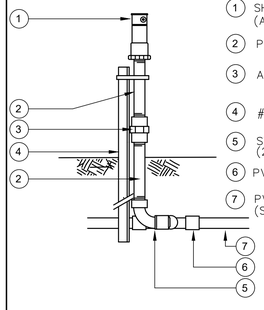


K CONTROLLER WITH PEDESTAL



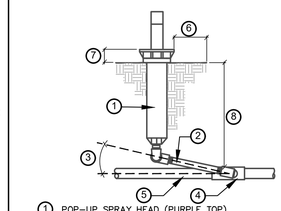
1. PVC SCH 80 RISER 4"
2. AIR RELEASE VALVE
3. ROUND PIT VALVE BOX (PURPLE LID)
4. PVC SCH 40 TEE (SxTxS)
5. 1 CU. FT. MIN. PEA GRAVEL SUMP
6. BRICK SUPPORTS
7. PVC NON-PRESSURE LATERAL
8. 1" ABOVE FINISH GRADE
9. PVC SCH 80 THREADED FITTING

L AIR RELEASE VALVE



1. SHRUB SPRAY HEAD W/ ADAPTER (ADJUST RISER PERP. TO SLOPE)
2. PVC SCH 80 RISER / NIPPLE (TYP.)
3. ANTI-DRAIN SPRING CHECK VALVE
4. #3 REBAR W/ GALV. CLAMPS
5. SWING JOINT ASSEMBLY (2 SCH. 40 STREET ELLS)
6. PVC SCH 40 TEE (SST) OR ELL (ST)
7. PVC NON-PRESSURE (LATERAL) LINE (SEE SPECS)

M HEAD ON RISER



1. POP-UP SPRAY HEAD (PURPLE TOP)
2. SWING JOINT ASSEMBLY (1 SCH 80 NIPPLE AND 3 SCH. 40 ST. ELLS)
3. ANGLE WILL VARY WITH HEIGHT OF POP-UP BODY
4. PVC SCH 40 TEE (SST) OF ELL (ST)
5. PVC NONPRESSURE LINE
6. 2" MAX. FROM CURBS, WALKS, ETC. AT FINISH GRADE IN TURF AREAS,
7. 1" IN SHRUB AREAS
8. 12" MIN. DEPTH

NOTE: CHECK VALVES SHALL BE INSTALLED AS REQUIRED TO CONTROL LOW HEAD DRAINAGE.

N POP UP HEAD

'DO NOT DRINK' SIGN
N.T.S.

O RECYCLED WATER SIGN

L-10

JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

LICENSED LANDSCAPE ARCHITECT
Signature
Ren Date
Date
STATE OF CALIFORNIA

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APP'D	DATE

SHEET 10	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

IRRIGATION DETAILS
TRI CITY MEDICAL CENTER

POINT OF CONTRACT - FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:

PLAN NUMBER
L18-00001

20180529 BIDSET

SECTION 02900
LANDSCAPING -
PSECTION 02900

LANDSCAPING

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATION SECTIONS APPLY TO WORK OF THIS SECTION, AND MUST BE FULLY CONSIDERED IN CONNECTION THEREWITH.

1.02 SCOPE

A. THE WORK INCLUDES ALL SERVICES, LABOR, MATERIALS, TRANSPORTATION AND EQUIPMENT NECESSARY TO PERFORM THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN AND AS REQUIRED TO COMPLETE PROPERLY THE CONTRACT.

B. RELATED WORK:

1. EARTHWORK (SECTION 02200)
2. IRRIGATION (SECTION 02810)

1.03 SUBMITTALS

A. SEE REQUIREMENTS IN GENERAL CONDITIONS, AND SECTION 01340.

B. CONTRACTOR SHALL SUBMIT A TYPEWRITTEN LIST WITH SPECIFICATIONS OF ALL FEASIBLE MATERIALS, INCLUDING SOIL AMENDMENTS, FERTILIZERS, PLANT MATERIALS, ETC., WITH QUANTITIES OF EACH.

1.04 DEFINITIONS OF TERMS

A. "PLANTING AREA" SHALL MEAN ALL AREAS TO BE SEEDED, SODDED, PLANTED WITH TREES, SHRUBS, AND/OR GROUNDCOVERS.

1.05 GUARANTEES AND REPLACEMENTS

A. PLANT MATERIALS: PLANTS (15-GALLON SIZE AND LARGER) SHALL BE GUARANTEED TO LIVE AND GROW IN HEALTHY CONDITION DURING THE AGREED UPON 90 DAY MAINTENANCE PERIOD OR UNTIL FINAL ACCEPTANCE (3.20 PART B). PLANT MATERIAL WILL CONTINUE TO BE GUARANTEED FOR ONE (1) YEAR.

B. PLANT MATERIAL SMALLER THAN 15-GALLON SIZE: SHALL BE GUARANTEED TO LIVE AND GROW IN VIGOROUS HEALTHY UPRIGHT CONDITION FOR A MINIMUM OF ONE GROWING SEASON AFTER FINAL ACCEPTANCE OF WORK (EXCLUDING SEASONAL COLOR).

C. REPLACEMENT: ALL PLANTS NOT HEALTHY AND IN VIGOROUS GROWING CONDITION AS DETERMINED BY THE LANDSCAPE ARCHITECT SHALL BE REPLACED IMMEDIATELY. PLANTS USED FOR REPLACEMENT SHALL BE THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED AND FERTILIZED AS ORIGINALLY SPECIFIED AT NO COSTS TO OWNER.

1.06 VERIFICATION OF EXISTING CONDITIONS

A. ALL SCALED DIMENSIONS ON THE DRAWINGS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS, QUANTITIES, AND GRADE ELEVATIONS, AND SHALL IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.

B. PRIOR TO THE EXCAVATION FOR PLANTING OR PLACING OF PLANT MATERIALS, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES AND OTHER IMPROVEMENTS, AND TAKE PROPER PRECAUTIONS TO AVOID DAMAGE TO SUCH IMPROVEMENTS. IN THE EVENT OF CONFLICT BETWEEN SUCH IMPROVEMENTS AND PLANT LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, AND ARRANGEMENTS WILL BE MADE FOR RELOCATION AS NECESSARY. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON THE CONTRACTOR THE RESPONSIBILITY FOR MAKING ANY AND ALL REPAIRS FOR DAMAGE RESULTING FROM WORK AS HEREIN SPECIFIED AT HIS OWN EXPENSE.

1.07 PROTECTION OF EXISTING IMPROVEMENTS

DURING THE CONSTRUCTION AND MAINTENANCE PERIOD, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT AND AVOID DAMAGE TO SPRINKLER HEADS, IRRIGATION LINES, DRAINAGE LINES, AND ALL OTHER UNDERGROUND FACILITIES AND ALL PAVING, STRUCTURES, FIXTURES, AND EXISTING PLANTINGS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGE TO SUCH IMPROVEMENTS AND SHALL COMPLETELY REPAIR OR REPLACE THE SAME AT NO COST TO THE OWNER.

1.08 INSTRUCTIONS AND OBSERVATION

A. ALL CHANGES AND DEVIATIONS TO THE PLANS AND SPECIFICATIONS BY THE LANDSCAPE ARCHITECT TO THE CONTRACTOR SHALL BE CONFIRMED IN WRITING.

B. THE CONTRACTOR'S SUPERVISOR SHALL BE AVAILABLE ON CALL TO MAKE A JOINT OBSERVATION WITH THE OWNER'S REPRESENTATIVE OF THE WORK. THE CONTRACTOR SHALL HAVE SUFFICIENT WORK PERSONNEL AVAILABLE DURING NORMAL WORKING HOURS TO CORRECT DEFICIENCIES IMMEDIATELY UPON REQUEST OF THE LANDSCAPE ARCHITECT. SUCH REPAIR OR RE-WORK SERVICES ARE TO BE PERFORMED WITHOUT INTERFERENCE OF REGULAR PROJECT SCHEDULE.

C. PLANTS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT AT THE PLACE OF GROWTH AND/OR UPON DELIVERY TO THE SITE FOR QUALITY, SIZE AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF OBSERVATION AND REJECTION AT THE SITE DURING PROGRESS OF WORK FOR SIZE, CONDITION OF ROOT BALL, LATENT DEFECTS, OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.

D. SITE OBSERVATIONS HEREIN SPECIFIED SHALL BE MADE BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF A SITE OBSERVATION AT LEAST 48 HOURS IN ADVANCE OF AN OBSERVATION. AN OBSERVATION WILL BE MADE BY THE LANDSCAPE ARCHITECT DURING OFFICE WORKING HOURS ON EACH OF THE STEPS OR CONDITIONS LISTED BELOW. THE CONTRACTOR OR HIS AUTHORIZED REPRESENTATIVE SHALL BE ON SITE AT THE TIME OF EACH OBSERVATION. THE CONTRACTOR WILL NOT BE PERMITTED TO INITIATE THE SUCCEEDING STEP OF WORK UNTIL HE HAS RECEIVED APPROVAL TO PROCEED BY THE LANDSCAPE ARCHITECT.

1. PRE-CONSTRUCTION MEETING: IMMEDIATELY PRIOR TO THE COMMENCEMENT OF WORK OF THIS SECTION, CONTRACTOR SHALL RECEIVE APPROVAL OF MATERIALS AND EQUIPMENT TO BE USED, AND METHODS OF INSTALLATION.

2. INCORPORATION OF SOIL CONDITIONING AND FERTILIZING INTO THE SOIL: SOIL TESTS PERFORMED BY THE LICENSED LABORATORY SHALL BE SUBMITTED AND PAID FOR BY THE CONTRACTOR FOR AGRICULTURAL SUITABILITY AND APPROVED BY THE LANDSCAPE ARCHITECT ONCE ROUGH GRADING HAS BEEN COMPLETED, AND PRIOR TO INSTALLING ANY PLANT MATERIAL.

3. UPON THE COMPLETION OF FINISH GRADING AND MOW CURBS LAYOUT IN THE FIELD, BUT PRIOR TO MOW CURB INSTALLATION.

4. APPROVAL OF ALL PLANT MATERIAL QUALITY.

5. LAYOUT OF PLANT MATERIAL.

6. PRE-MAINTENANCE OBSERVATION: WHEN PLANTING AND ALL OTHER INDICATED OR SPECIFIED WORK, EXCEPT THE MAINTENANCE PERIOD, HAS BEEN COMPLETED. ACCEPTANCE AND WRITTEN APPROVAL SHALL ESTABLISH BEGINNING OF THE MAINTENANCE PERIOD. THIS IS NOT A FINAL OBSERVATION OR ACCEPTANCE, AND IT DOES NOT RELIEVE THE CONTRACTOR FROM ANY OF THE RESPONSIBILITIES IN THE CONTRACT DOCUMENTS FOR THIS PROJECT.

7. FINAL SITE OBSERVATION AT THE COMPLETION OF THE SPECIFIED MAINTENANCE PERIOD. THIS OBSERVATION SHALL ESTABLISH THE BEGINNING DATE FOR THE GUARANTEE PERIOD.

E. ACCEPTANCE: UPON COMPLETION OF THE FINAL OBSERVATION AND THE WORK OF THIS SECTION, THE CONTRACTOR WILL BE NOTIFIED IN WRITING (1) WHETHER THE WORK IS ACCEPTABLE AND (2) OF ANY REQUIREMENTS NECESSARY FOR COMPLETION AND ACCEPTANCE.

1.09 SUSPENSION OF WORK

A. THE LANDSCAPE ARCHITECT SHALL RECOMMEND TO THE OWNER ANY NECESSITY TO SUSPEND THE WORK WHOLLY, OR IN PART, FOR SUCH PERIOD OR PERIODS AS HE MAY DEEM NECESSARY DUE TO UNSUITABLE WEATHER, OR SUCH OTHER CONDITIONS AS ARE CONSIDERED UNFAVORABLE FOR THE REASONABLE PERFORMANCE OF THE WORK, OR FOR SUCH TIME AS IS NECESSARY DUE TO THE FAILURE ON THE PART OF THE CONTRACTOR TO CARRY OUT ORDERS GIVEN OR TO PERFORM ANY OR ALL PROVISIONS OF THE CONTRACT.

B. IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR AN INDEFINITE PERIOD, THE CONTRACTOR SHALL STORE ALL MATERIALS IN SUCH A MANNER THAT THEY WILL NOT BECOME AN OBSTRUCTION NOR BECOME DAMAGED IN ANY WAY, AND HE SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK PERFORMED. THE CONTRACTOR SHALL COVER ALL OPEN EXCAVATIONS AND SHALL PROVIDE SUITABLE DRAINAGE BY OPENING DITCHES, PLANTING PITS, ETC., AND ERECT TEMPORARY STRUCTURES WHERE NECESSARY.

C. GRADING, SOIL PREPARATION, AND PLANTING WORK SHALL BE PERFORMED ONLY DURING PERIODS WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. IF THE MOISTURE CONTENT OF THE SOIL SHOULD REACH A LEVEL THAT WORKING IT WOULD DESTROY THE SOIL STRUCTURE, SPREADING, GRADING AND TILLING OPERATIONS SHALL BE SUSPENDED UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS AND THE DESIRED RESULTS ARE ATTAINABLE.

1.10 CERTIFICATIONS AND NOTICE OF DELIVERY OF MATERIAL

A. THE LANDSCAPE ARCHITECT SHALL BE FURNISHED WITH DUPLICATE SIGNED, LEGIBLE COPIES OF CERTIFICATES AND/OR INVOICES STATING THE BRAND, GRADE, AMOUNT AND QUANTITY OF EACH ITEM FOR ALL SOIL, FERTILIZERS, SOIL CONDITIONERS, PLANS AND OTHER MATERIALS. RECOMMENDATION SHALL BE MADE BY THE LANDSCAPE ARCHITECT TO THE OWNER TO STOP WORK PROGRESS UNTIL CERTIFICATES ARE RECEIVED AND REVIEWED BY THE LANDSCAPE ARCHITECT.

B. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN ADVANCE WHEN ALL MATERIALS ARE TO BE DELIVERED AND THE MANNER OF SHIPMENT, AND SHALL FURNISH THEREWITH AN ITEMIZED LIST, IN DUPLICATE, OF THE ACTUAL QUANTITY OF MATERIAL IN EACH DELIVERY, IN ORDER TO ENSURE SATISFACTORY COORDINATION OF DELIVERY, AND TO EXPEDITE THE REQUIRED INSPECTION AT THE POINT OF DELIVERY. THE ITEMIZED LIST, IN DUPLICATE, FOR EACH DELIVERY OF PLANT MATERIAL SHALL INCLUDE INVOICES CERTIFYING THAT SUBJECT MATERIAL HAS BEEN INSPECTED AS REQUIRED BY THE STATE AGRICULTURAL CODE PRIOR TO ACCEPTANCE OR PLANTING. PARTICULAR CARE, USING APPROVED EQUIPMENT, SHALL BE EXERCISED TO ENSURE SAFE LOADING, UNLOADING, SHIPPING AND HANDLING FOR ALL PLANTINGS FROM SOURCE TO IN-PLACE LOCATIONS INDICATED ON THE DRAWINGS.

1.11 PLANT MATERIALS

A. QUANTITIES FOR PLANT MATERIALS ARE SHOWN PER PLAN FOR CONVENIENCE ONLY AND NOT GUARANTEED. CONTRACTOR SHALL CHECK AND VERIFY COUNT AND SUPPLY SUFFICIENT NUMBER TO FULFILL INTENT OF DRAWINGS.

1.12 INVOICE OF MATERIALS

A. UPON DELIVERY OF MATERIALS AND/OR COMPLETION OF ALL SOIL CONDITIONING AND GRADING, BUT PRIOR TO INITIATING PLANTING OPERATIONS, THE LANDSCAPE ARCHITECT WITH THE HERETOFORE SPECIFIED SIGNED COPIES OF REQUIRED CERTIFICATES, TRIP SLIPS AND INVOICES FOR SOIL PREPARATION MATERIALS, SHALL INVOICE SUCH MATERIAL, COMPARING THE TOTAL QUANTITIES OF EACH MATERIAL FURNISHED AGAINST THE TOTAL AREA TO EACH OPERATION. IF THE MINIMUM RATES OF APPLICATION HAVE NOT BEEN MET, THE LANDSCAPE ARCHITECT WILL REQUIRE THE DISTRIBUTION OF ADDITIONAL QUANTITIES OF THESE MATERIALS TO FULFILL THE MINIMUM REQUIREMENTS SPECIFIED.

B. AFTER INSTALLATION OF PLANT MATERIALS, BUT PRIOR TO THE PRE-MAINTENANCE SITE OBSERVATION, THE LANDSCAPE ARCHITECT, WITH THE HERETOFORE SPECIFIED SIGNED COPIES OF THE REQUIRED CERTIFICATES AND RELATED ITEMS, SHALL INVOICE SUCH MATERIAL, COMPARING THE TOTAL AREA AND/OR THE AMOUNTS SPECIFIED. IF THE MINIMUM AMOUNTS HAVE NOT BEEN FURNISHED, THE LANDSCAPE ARCHITECT WILL REQUIRE THE INSTALLATION OF ADDITIONAL MATERIALS TO FULFILL THE MINIMUM REQUIREMENTS SPECIFIED.

C. A SAMPLE OF THE SOIL AMENDMENTS SHALL BE DELIVERED TO THE LANDSCAPE ARCHITECT WITHIN 15 DAYS AFTER RECORDING OF THE CONTRACT FOR SUBMITTAL TO A TESTING LABORATORY, ALONG WITH SPECIFICATIONS OF EACH PRODUCT. AFTER SOIL AMENDMENTS HAVE BEEN THOROUGHLY MIXED INTO THE SITE, RANDOM SAMPLES OF THE MIXED SOIL WILL BE TAKEN BY THE OWNER'S REPRESENTATIVE AND SUBMITTED TO THE SOIL LABORATORY FOR COMPARISON TO A CONTROL MIX. COST OF THE ABOVE TESTING BY THE SOILS LABORATORY SHALL BE BORNE BY THE CONTRACTOR.

1.13 PROTECTION OF EXISTING TREES, SHRUBS AND VINES

A. IT IS THE INTENT OF THE PROJECT THAT CERTAIN AREAS OF THE EXISTING PLANT MATERIALS SHALL BE RETAINED. PRIOR TO THE REMOVAL OF ANY TREES, THE CONTRACTOR SHALL CONFER WITH THE LANDSCAPE ARCHITECT TO DETERMINE THOSE PLANTS THAT ARE TO REMAIN.

B. ALL EXISTING TREES WHICH ARE TO REMAIN IN THE PROJECT SHALL BE TAGGED AND IDENTIFIED BY THE CONTRACTOR PRIOR TO START OF WORK.

C. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TREES THAT ARE TO REMAIN IN THE PROJECT. DAMAGE TO A PLANT WHICH RESULTS IN DEATH OR PERMANENT DISFIGURATION SHALL RESULT IN THE COMPLETE REMOVAL OF THE PLANT, INCLUDING ROOTS, FROM THE SITE BY THE CONTRACTOR. THE CONTRACTOR AT HIS OWN EXPENSE SHALL REPLACE THE PLANT WITH ONE OF EQUAL VALUE AS ESTABLISHED BY THE LANDSCAPE ARCHITECT OR REIMBURSE THE OWNER THE COST OF SAID REPLACEMENT IF A REPLACEMENT CANNOT BE OBTAINED. THE LANDSCAPE ARCHITECT SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE PLANT.

D. ALL EXISTING TREES THAT ARE TO REMAIN SHALL BE PROTECTED AT ALL TIMES FROM DAMAGE BY MEN AND EQUIPMENT. ALL DAMAGE BY THE CONTRACTOR TO EXISTING PLANTS SHALL BE REPAIRED AT HIS EXPENSE BY PERSONNEL APPROVED BY THE LANDSCAPE ARCHITECT.

E. THE CONTRACTOR SHALL INSURE THAT NO FOREIGN MATERIAL AND/OR LIQUID, SUCH AS PAINT, CONCRETE, CEMENT, OIL, TURPENTINE, ACID OR THE LIKE, BE DEPOSITED OR ALLOWED TO BE DEPOSITED ON ANY SOIL WITHIN THE DRIPLINE (THE OUTSIDE EDGE OF FOLIAGE OVERHAND) OF ANY TREE OR SHRUB OR WITHIN 6' OF THE TRUNK OF A VINE. SHOULD ANY SUCH POISONING OF THE SOIL OCCUR, THE CONTRACTOR SHALL REMOVE SAID SOIL AS DIRECTED BY THE LANDSCAPE ARCHITECT AND REPLACE IT WITH ACCEPTABLE SOIL AT NO EXPENSE TO THE OWNER.

F. EXCAVATION ADJACENT TO EXISTING TREES AND SHRUBS: WHERE IT IS NECESSARY TO EXCAVATE IN CLOSE PROXIMITY TO EXISTING TREES AND SHRUBS, ALL POSSIBLE CAUTION SHALL BE EXERCISED TO AVOID INJURY TO ROOTS AND TRUNK. EXCAVATION CLOSE TO TREES SHALL BE BY HAND, TUNNELING UNDER ROOTS 2" AND LARGER IN DIAMETER. CUTTING OF ROOTS 2" AND LARGER SHALL BE ONLY ON THE APPROVAL OF THE LANDSCAPE ARCHITECT. PAINT CUT ROOTS WITHIN 24 HOURS OF INITIAL DAMAGE WITH APPROVED PRUNING PAINT. WHEN THIS IS NOT POSSIBLE, KEEP THE SIDE OF EXCAVATION ADJACENT TO TREE SHADED WITH MOIST BURLAP OR CANVAS.

PART 2 - PRODUCTS

2.01 QUALITY

A. ALL MATERIALS SHALL BE OF STANDARD, APPROVED, AND FIRST GRADE QUALITY AND SHALL BE IN PRIME CONDITION WHEN INSTALLED AND ACCEPTED. ALL COMMERCIALLY PROCESSED AND/OR PACKAGED MATERIALS SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED CONTAINERS BEARING THE MANUFACTURER'S GUARANTEED ANALYSIS.

2.02 SOIL AMENDMENT AND FERTILIZER

*** A. SHALL BE A WOOD RESIDUAL PRODUCT DERIVED FROM THE BARK OF PINE, REDWOOD, WHITE FIR AND RED FIR, OR CEDAR SHAVINGS. AMENDMENT UPON ANALYSIS CONTAIN AT LEAST 0.5% NITROGEN (ON A DRY WEIGHT BASIS) WITH AN ASH CONTENT NOT TO EXCEED 10%. A COMMERCIAL GRADE PRODUCT SHALL BE USED.

CONTRACTOR SHALL SUPPLY ARCHITECT OR HIS APPOINTED REPRESENTATIVE WITH A SAMPLE OF THE PROPOSED AMENDMENT ACCOMPANIED BY LABORATORY ANALYTICAL ANALYSIS FROM AN APPROVED LABORATORY ILLUSTRATING DEGREE OF COMPLIANCE. GUARANTEE WT./CU/YD. = +560# - 820#.

NITROGEN (ORGANIC OR AMMONIC) 0.5%.
PH (LESS THAN) 6.8.
SALINITY (EC0 X 103 AT 250 C) = 2.5.
ASH CONTENT NOT TO EXCEED 10%.
IRON (FE) EXPRESSED AS METALLIC 0.08%.
DENSITY - APPROX. 25 LBICU/FT.
ORGANIC MATTER = 85%. A NON-IONIC WETTING AGENT SHOULD BE USED.

PROPERTIES: SCREEN ANALYSIS: % RETAINED ON STACKED SCREENS - 1 MESH = 0.2%; 5 MESH = 36.6%; 8 MESH = 25.7%; 12 MESH = 30.7%; 32 MESH = 5.9%; REMAINDER 0.9%.

SHALL BE WIL-GRO LIFE, FOREST HUMUS, OR LOAMEX. IF NOT AVAILABLE, SHALL BE EQUAL TO.

B. AGRICULTURAL GRADE GYPSUM - SHALL BE A (CA SO4 - H20) CALCIUM SULFATE PRODUCT - 94.3%. 90% SHALL PASS A 50 MESH SCREEN. CHEMICAL REACTION WILL REMOVE SODIUM ATTACHED TO SOIL PARTICLES. GYPSUM ALSO LOOSENS HEAVY CLAY SOILS THROUGH ELECTRO-CHEMICAL ACTION. CONTROL OF DUST DURING APPLICATION IS MANDATORY.

SHALL BE U.S. GYPSUM, DOLMAR, SOF'N'SOIL, OR BANDINI, IF NOT AVAILABLE, SHALL BE EQUAL TO.

C. SULPHUR (SOIL) - SHALL BE ELEMENTAL SULPHUR (99.5%) COMMERCIALLY PREPARED SO THAT 46.9% PASSES A 50 MESH SCREEN.

SHALL BE WIL-GRO, UNION CHEMICALS OR BAKER INDUSTRIES, IF NOT AVAILABLE, SHALL BE EQUAL TO.

D. IRON SULFATE - IRON SHALL BE EXPRESSED AS METALLIC - DERIVED FROM SULFATE - DEEP GREEN (FE SO4 H20). A MINIMUM ANALYSIS OF 20.0% AND 98.3% RETAINED ON A 10 MESH SCREEN.

SHALL BE WILSON & GEO. MEYER, WIL-GRO, OR BANDINI. IF NOT AVAILABLE, SHALL BE EQUAL TO.

***E. PRE-PLANT OR STARTER FERTILIZER SHALL BE A COMMERCIAL GRADE FLOWABLE FERTILIZER WITH - 1% NITROGEN, 10% PHOSPHOROUS PENTIOXIDE AND 10% POTASSIUM SULFATE. NO POTASSIUM CHLORIDE IS TO BE USED. ORGANIC NITROGEN SHALL BE FROM COTTONSEED MEAL AND UREA. PHOSPHATE AVAILABLE FROM SUPERPHOSPHATE AND COTTONSEED MEAL. POTASH FROM SULFATE OF POTASH AND COTTONSEED MEAL.

SCREEN ANALYSIS: % RETAINED ON STACKED SCREEN - APPROXIMATELY 8 - MESH 24.2%; 20 - MESH 75.2%; 48 - MESH 0.2%. AVAILABLE PERCENTAGE WEIGHT OF PLANT FOOD:

NITROGEN	1.0% MIN.
PHOSPHORIC ACID	10.0% MIN.
POTASH	10.0% MIN.

SHALL BE WIL-GRO, BANDINI OR KELLOGG. IF NOT AVAILABLE, SHALL BE EQUAL TO. ORGANIC SOIL ENHANCER AND SOIL ACTIVATOR SHALL BE SARVON.

F. POST PLANT FERTILIZER (MAINTENANCE): FERTILIZER (COMMERCIAL) SHALL BE A COMBINATION OF NATURAL ORGANIC AND INORGANIC GRANULAR FERTILIZERS, FREE-FLOWING, SUITABLE FOR APPLICATION WITH APPROVED EQUIPMENT AND SHALL CONTAIN THE FOLLOWING MINIMUM AVAILABLE PERCENTAGES BY WEIGHT OF PLANT FOOD:

NITROGEN	14.0% MIN.
AMMONIAC SULFATE	4.0% MIN.
REMAINDER OF NITROGEN	8.75% WATER SOLUBLE
	1.25% WATER INSOLUBLE
PHOSPHORIC ACID	7.0% MIN.
POTASH	3.0% MIN.
IRON	2.0%
ZINC	0.15%
MANGANESE	0.15%
CALCIUM	2.0%

ORGANIC NITROGEN IS DERIVED FROM UREA AND COTTONSEED MEAL. PHOSPHATE FROM SUPERPHOSPHATE AND COTTONSEED MEAL. POTASH FROM SULFATE OF POTASH AND COTTONSEED MEAL. NO POTASSIUM CHLORIDE IS TO BE USED. SULFUR FROM SULFATE OF AMMONIA. CALCIUM FROM SUPERPHOSPHATE, IRON FROM FERROUS SULFATE AND MIXED SULFIDES. ZINC AND MANGANESE ARE EXPRESSED AS METALLIC AND IN THEIR ELEMENTAL FORM.

SCREEN ANALYSIS:(% RETAINED) - APPROXIMATELY: 4 MESH = 1.3%; 8 MESH = 24.2%; 20 MESH = 74.0%; AND 48 MESH 0.05%.

SHALL BE WIL-GRO FAIRWAY, BANDINI, OR KELLOGG. IF NOT AVAILABLE, SHALL BE EQUAL TO.

G. PLANTING TABLETS SHALL BE TIGHTLY COMPRESSED CHIP TYPE COMMERCIAL GRADE PLANTING TABLETS, OF VARYING SIZES WITH THE FOLLOWING AVAILABLE PERCENTAGES BY WEIGHT OF PLANT FOOD:

NITROGEN	20.0% MIN.
PHOSPHORIC ACID	10.0% MIN.
POTASH	5.0% MIN.

SHALL BE AGRIFORM OR GRO-POWER. IF NOT AVAILABLE, SHALL BE EQUAL TO.

2.03 PLANTING BACKFILL FOR TREES AND SHRUBS

***A. RATE OF APPLICATION IS FOR BIDDING PURPOSES ONLY. SOIL TEST MAY REDUCE OR INCREASE TOTAL SOIL YARDAGE AMENDMENT AND CHEMICAL ADDITIVES. PLANTING BACKFILL SHALL BE A THOROUGHLY BLENDED MIXTURE OF TOPSOIL AND SOIL AMENDMENTS AT THE FOLLOWING MIXTURES:

SOIL AMENDMENT	1/2 C.Y.
STOCK PILED SITE SOIL	1/2 C.Y.
GYPSUM	5 LBS. PER/CU/YD. OF MIX
SULPHUR (SOIL)	1 LBS. PER/CU/YD. OF MIX
IRON SULFATE	1 LBS. PER/CU/YD. OF MIX
PRE-PLANT (1-10-10)	3 LBS. PER/CU/YD. OF MIX

2.04 IMPORTED TOPSOIL

A. DEFINITION

1. IMPORTED TOPSOIL SHALL BE FROM A SOURCE OUTSIDE THE LIMITS OF THE PROJECT SELECTED BY THE CONTRACTOR AND IN COMPLIANCE WITH THE REQUIREMENTS SPECIFIED HEREIN. THE OWNER'S REPRESENTATIVE MAY MAKE SUCH INSPECTIONS AND PERFORM SUCH TESTS AS DEEMED NECESSARY TO DETERMINE THAT THE MATERIAL MEETS THE REQUIREMENTS.

2. AT LEAST 15 DAYS BEFORE SCHEDULED USE, THE PROPOSED SOURCE OF TOPSOIL MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR APPROVAL WHICH SHALL BE ACCOMPANIED BY A WRITTEN REPORT OF A TESTING AGENCY REGISTERED BY THE STATE FOR AGRICULTURAL SOIL EVALUATION WHICH STATES THAT THE PROPOSED SOURCE COMPLIES WITH THESE SPECIFICATIONS. IMPORTED TOPSOIL SHALL BE SCREENED, FERTILE, FRIABLE SOIL FROM WELL DRAINED AERATED LAND, AND FREE FROM NUTGRASS, REFUSE, ROOTS, HEAVY CLAY, NOXIOUS WEEDS, STONES LARGER THAN 1-INCH (25MM) IN GREATEST DIMENSIONS OR ANY MATERIAL TOXIC TO PLANT GROWTH. IT SHALL NOT BE INFESTED WITH NEMATODES OR OTHER UNDESIRABLE INSECTS AND PLANT DISEASE ORGANISMS. THE IMPORTED TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS:

***a. GRADATION LIMITS. TOPSOIL CONTENT SHALL BE AS FOLLOWS: SILT 20-45%; CLAY 15-20%; SAND 30-60%; WITH A MINIMUM OF 5% ORGANIC MATERIAL (NATURAL OR ADDED). PH SHALL NOT BE LOWER THAN 5.5 NOR EXCEED 8.3 AND SOLUBLE SALTS SHALL NOT EXCEED 1,500 PPM. MINIMUM DEPTH OF TOPSOIL SHALL BE 6 INCHES.

b. PERMEABILITY RATE/ NOT LESS THAN 0.5 INCHES (13MM) PER HOUR NOR MORE THAN 2 INCHES (50MM) PER HOUR WHEN TESTED IN ACCORDANCE WITH ASTM D 2434 OR OTHER APPROVED METHODS.

c. AGRICULTURAL SUITABILITY. THE TOPSOIL SHALL BE SUITABLE TO SUSTAIN THE GROWTH OF THE PLANTS SPECIFIED.

B. SUPPLY IMPORTED TOPSOIL IN THE FOLLOWING PROPORTIONS:

1. PLANTING SPILL MIXTURE:
MIXTURE SHALL BE THOROUGHLY MIXED TO THE FOLLOWING PROPORTIONS:

IMPORTED TOPSOIL	-	1 PART PER CUBIC YARD
SOIL CONDITIONER	-	1 PART PER CUBIC YARD
IRON SULFATE	-	1 POUND PER CUBIC YARD
SOIL SULFUR	-	1 POUND PER CUBIC YARD
GYPSUM	-	12 POUNDS PER CUBIC YARD

2. FOR ALL GROUNDCOVER AREAS, TOPSOIL SHALL BE SUPPLIED, MIXED WITH SOIL AMENDMENT AT THE RATE OF 3 PARTS OF TOPSOIL TO 1 PART OF SOIL AMENDMENT, SULFUR IRON SULFATE AND PRE-PLANT FERTILIZER (SEE SECTION 2.03 FOR QUANTITIES) TO A DEPTH OF 4" OR 1" DEEP OVER ALL THE AREA, AND THEN ROTOTILLED INTO THE SOIL TO AT LEAST 4" DEEP.

2.05 EARTH MOUNDS

A. ALL SOILS FOR EARTH MOUNDS SHALL BE AS APPROVED BY THE LANDSCAPE ARCHITECT. SAMPLES SHALL BE SUBMITTED BEFORE SITE DELIVERY. LANDSCAPE ARCHITECT SHALL APPROVE ALL GRADING PRIOR TO FINAL PLACEMENT OF ANY PLANT MATERIALS.

20180529 BIDSET

L-11

REGISTERED LANDSCAPE ARCHITECT
Signature
Ben Date
Date
STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 11	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

PLANTING SPECIFICATIONS
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK	Checked By:	PLAN NUMBER
JAMES P. BENEDETTI R.L.A. #3058	Approval Date:	L18-00001

2.06 PLANT MATERIALS

A. NOMENCLATURE: SCIENTIFIC AND COMMON NAMES OF PLANTS HEREIN SPECIFIED SHALL CONFORM WITH THE APPROVED NAMES GIVEN IN "A CHECKLIST OF WOODY ORNAMENTAL PLANTS OF CALIFORNIA," PUBLISHED BY THE UNIVERSITY OF CALIFORNIA, COLLEGE OF AGRICULTURE, MANUAL 32 (1963). SEE LIST OF PLANT MATERIAL ON DRAWINGS.

B. LABELING: EACH GROUP OF PLANT MATERIALS DELIVERED ON SITE SHALL BE CLEARLY LABELED AS TO SPECIES AND VARIETY. HOWEVER, FINAL DETERMINATION OF PLANT SPECIES AND VARIETY WILL BE MADE BY THE LANDSCAPE ARCHITECT, WHOSE DECISION WILL BE FINAL. ALL PATENTED PLANTS (CULTIVARS) REQUIRED BY THE PLANT LIST SHALL BE DELIVERED WITH A PROPER PLANT PATENT ATTACHED.

C. QUALITY AND SIZE: ALL PLANTS SHALL BE VIGOROUS, OF NORMAL GROWTH, FREE FROM DISEASES, INSECTS, INSECT EGGS, AND/OR EXCEED THE MEASUREMENTS SPECIFIED.

D. CONTAINER STOCK: SHALL HAVE GROWN IN CONTAINERS FOR AT LEAST SIX MONTHS, BUT NOT OVER TWO YEARS. NO CONTAINER PLANTS THAT HAVE CRACKED OR BROKEN BALLS OF EARTH WHEN TAKEN FROM THE CONTAINER SHALL BE PLANTED, EXCEPT UPON SPECIAL APPROVAL. NO TREES WITH DAMAGED ROOTS OR BROKEN BALLS SHALL BE PLANTED.

E. PRUNING: AT NO TIME SHALL THE PLANT MATERIALS BE PRUNED, TRIMMED OR TOPPED PRIOR TO DELIVERY, AND ANY ALTERATION ON THE SITE OF THEIR SHAPE SHALL BE CONDUCTED ONLY WITH THE APPROVAL AND IN THE PRESENCE OF THE LANDSCAPE ARCHITECT.

F. INSPECTION OF PLANT MATERIALS: REQUIRED BY CITY, COUNTY OR STATE AUTHORITIES, SHALL BE A RESPONSIBILITY OF THE CONTRACTOR, AND WHEN NECESSARY HE SHALL HAVE SECURED PERMITS OR CERTIFICATES PRIOR TO DELIVERY OF PLANTS AT SITE.

G. ON-SITE INSPECTION OF PLANT MATERIALS: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL OR REJECTION AT THE PROJECT SITE AT ANY TIME BEFORE OR DURING PROGRESS OF WORK FOR SIZE, VARIETY, CONDITION, LATENT DEFECTS AND INJURIES. REJECTED PLANTS SHALL BE REMOVED FROM THE PROJECT SITE IMMEDIATELY.

H. REJECTION AND SUBSTITUTION: ALL PLANTS NOT CONFORMING TO THE REQUIREMENTS HEREIN SPECIFIED SHALL BE CONSIDERED DEFECTIVE, AND SUCH PLANTS, WHETHER IN PLACE OR NOT, SHALL BE MARKED AS REJECTED AND BE IMMEDIATELY REMOVED FROM THE SITE OF THE WORK AND REPLACED WITH ACCEPTABLE PLANT MATERIALS. THE PLANT MATERIALS SHALL MEET ALL APPLICABLE INSPECTIONS REQUIRED BY LAW. ALL PLANTS SHALL BE THE SPECIES, VARIETY, SIZE, AGE, FLOWER COLOR AND CONDITION AS SPECIFIED HEREIN AND/OR AS INDICATED ON THE DRAWINGS. UNDER NO CONDITION WILL THERE BE ANY SUBSTITUTION OF PLANT SPECIES, VARIETY, OR REDUCED SIZE FOR THOSE LISTED ON THE ACCOMPANYING DRAWINGS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.

I. RIGHT TO CHANGES: THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO CHANGE THE SPECIES, VARIETY AND/OR SIZES OF PLANT MATERIAL TO BE FURNISHED, PROVIDED THAT THE COST OF SUCH PLANT CHANGES DOES NOT EXCEED THE COST OF PLANTS IN THE ORIGINAL BID. THE CONTRACTOR SHALL BE NOTIFIED AND CONFIRMED IN WRITING PRIOR TO SIXTY (60) DAYS BEFORE THE PLANTING OPERATION HAS COMMENCED. CHANGES IN THE SIZE AND/OR VARIETY OF ANY PLANT TO BE FURNISHED WHICH INVOLVES A REDUCTION OR ADDITION IN COST SHALL BE ADJUSTED IN THE CONTRACT COST.

J. ROOT CONDITION: THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ROOT CONDITION OF ANY SPECIES, PARTICULARLY THOSE GROWN FROM SEED, AND IF FOUND DEFECTIVE, TO REJECT THE PLANTS REPRESENTED BY THE DEFECTIVE SAMPLE.

K. PROTECTION: ALL PLANTS AT ALL TIMES SHALL BE HANDLED AND STORED SO THAT THEY ARE ADEQUATELY PROTECTED FROM DRYING OUT, FROM WIND BURN, AND FROM ALL OTHER INJURY. ALL PLANTS DETERMINED BY THE OWNER'S REPRESENTATIVE TO BE WILTED, BURNED OR DRIED OUT MAY BE REJECTED AND REMOVED FROM THE SITE. THE CONTRACTOR'S ON-SITE PLANT STORAGE AREA SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE DELIVERY OF ANY PLANT MATERIALS.

L. SHRUB AND TREE SAMPLES: TYPICAL SAMPLES, THREE EACH OF ALL VARIETIES AND SIZES (SHRUBS 5 GALLON AND UNDER, TREES 15 GALLON AND UNDER) OF ALL PLANT MATERIALS SHALL BE SUBMITTED FOR INSPECTION APPROVAL AT THE SITE A MINIMUM OF FIFTEEN (15) DAYS PRIOR TO PLANTING OPERATIONS. APPROVED SAMPLES SHALL REMAIN ON THE SITE AND SHALL BE MAINTAINED BY THE CONTRACTOR AS STANDARDS OF COMPARISON FOR PLANT MATERIALS TO BE FURNISHED. SAMPLES WILL BE INCORPORATED INTO THE WORK.

M. SPECIMEN TREE SELECTION:

1. ONE SAMPLE EACH OF EACH TREE VARIETY AND SIZE, AS CALLED OUT ON DRAWINGS, 24" BOX AND LARGER SHALL BE DELIVERED TO THE PROJECT SITE FOR APPROVAL PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY TREES NOT APPROVED.
3. THE CONTRACTOR AT HIS OPTION AND AT HIS EXPENSE, CAN RETAIN THE SERVICES OF THE LANDSCAPE ARCHITECT TO REVIEW TREES 24" BOX SIZE OR LARGER TAGGED AT THE NURSERY AND/OR AT ITS PLACE OF GROWTH.

2.07 GROUNDCOVER

A. GROUNDCOVER PLANTS SHALL BE HEALTHY, VIGOROUS ROOTED CUTTINGS GROWN IN FLATS.

2.10 PLANTER MULCH

A. PLANTER MULCH SHALL BE SHREDDED FIR TREE BARK. SHALL RANGE IN SIZE FROM 1/2-INCH TO 3/4-INCH.

2.11 STAKING MATERIAL

A. TREE GUY WIRES SHALL BE OF PLIABLE, ZINC-COATED STEEL MINIMUM GAUGE NO. 12 AND ANCHOR TO APPROPRIATE DEAD MAN. WIRE LOOPS AT BRANCHES SHALL BE COVERED BY 2-PLY REINFORCED RUBBER 1/4" IN DIAMETER. GUY WIRES SHALL BE FLAGGED WITH 1/8" DIAMETER X 4"-0" LENGTH SURGICAL TUBING. TREE TIES SHALL BE V.I.T. CINCH-TIE AVAILABLE FROM V.I.T. COMPANY, (714) 891-8338.

*2.12 ROOT BARRIER

A. ROOT BARRIER SHALL BE A MULTI-YEAR ROOT CONTROL SYSTEM CONSISTING OF HERBICIDAL TIME-RELEASED NODULES PERMANENTLY ATTACHED TO A PERMEABLE GEOTEXTILE FABRIC WHICH WILL INHIBIT PLANT ROOT ENCROACHMENT.

ACTIVE INGREDIENT: TRIFLURALIN (A,A,A - TRIFLURO-2, 6-DINITRO - N, N - DIPROPYL - P - TOLUIDINE) 17.1%
INERT INGREDIENTS 82.9%

SHALL BE BIO-BARRIER. IF NOT AVAILABLE, SHALL BE EQUAL TO.

2.13 PRE-EMERGENT HERBICIDE

A. PRE-EMERGENT HERBICIDE SHALL BE AS DETERMINED BY THE LANDSCAPE CONTRACTOR.

2.14 WEED CONTACT HERBICIDE

A. WEED CONTACT HERBICIDE SHALL BE AS DETERMINED BY THE LANDSCAPE CONTRACTOR.

PART 3 - EXECUTION

3.01 INSPECTION

A. EXAMINE PROPOSED PLANTING AREAS AND CONDITIONS OF INSTALLATION. DO NOT START PLANTING WORK UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

3.02 PREPARATION

A. GENERAL: THE AREAS TO RECEIVE TREES, SHRUBS, GROUNDCOVER AND HYDROSEED PLANTINGS AND THEIR RESPECTIVE REQUIREMENTS FOR IMPORTED TOPSOIL, FERTILIZING , SOIL CONDITIONING, AND OTHER TREATMENT SHALL BE AS DEFINED ON THE DRAWINGS. EQUIPMENT NECESSARY FOR PREPARATION OF THE GROUND SURFACE AND FOR HANDLING AND PLACING ALL REQUIRED MATERIAL SHALL BE ON HAND IN GOOD WORKING CONDITION. WORK SHALL BE PERFORMED ONLY DURING PERIODS WHEN BENEFICIAL RESULTS CAN BE OBTAINED.

B. CLEARING AND GRUBBING: PRIOR TO RIPPING AND TILLAGE OPERATIONS, ALL VEGETATION IN THE AREA TO BE PLANTED SHALL BE GRUBBED, RAKED AND CLEARED FROM THE SITE. THE GROUND SURFACE SHALL BE CLEARED OF ALL MATERIAL THAT HAS ACCUMULATED DURING CONSTRUCTION IN ADDITION TO ALL MATERIAL THAT MIGHT HINDER PROPER GRADING, TILLAGE, PLANTING AND SUBSEQUENT MAINTENANCE OPERATION. ALL GRUBBED MATERIALS AND DEBRIS SHALL BE LAWFULLY DISPOSED OF OFF THE SITE BY THE CONTRACTOR AT HIS COST.

C. OBSTRUCTION BELOW GROUND: ALL SUBSURFACE ROCKS OVER 2" IN DIAMETER AND OTHER UNDERGROUND OBSTRUCTIONS SHALL BE REMOVED TO THE DEPTH NECESSARY TO PERMIT PROPER FINE GRADING, TILLING, OR PLANTING ACCORDING TO PLANS AND SPECIFICATIONS. ALL ABANDONED UTILITY LINES UNCOVERED OR SEVERED SHALL BE CUT BELOW GRADE AND CAPPED OR PLUGGED WITH CONCRETE. EXPLOSIVES SHALL NOT BE USED FOR REMOVAL. WHEN THE LOCATION OF UTILITY LINES IS SHOWN ON THE PLANS OR HAS BEEN MADE KNOWN TO THE CONTRACTOR, ALL DAMAGE TO THESE LINES SHALL BE REPAIRED BY THE CONTRACTOR IN A MANNER APPROVED BY THE LANDSCAPE ARCHITECT AND AFFECTED UTILITY.

D. DEEP RIPPING: ALL AREAS (INCLUDING SLOPES) TO RECEIVE GROUNDCOVER, SHRUBS, AND HYDROSEEDING SHALL BE DEEP RIPPED AND LOOSENED TO A DEPTH OF TWELVE INCHES (12") IN ALL DIRECTIONS.

3.03 SOIL AMENDMENTS, FERTILIZING AND ROTOTILLING

A. RATE OF APPLICATION IS FOR BIDDING PURPOSES ONLY. SOIL TEST MAY REDUCE OR INCREASE TOTAL SOIL AMENDMENT YARDAGE. ADJUSTMENTS (PLUS OR MINUS) MAY BE NECESSARY. CONTRACTOR SHALL OBTAIN AT LEAST TWO SOIL TESTS OF ROUGH GRADE AT SITE AND SUBMIT RESULTS TO THE LANDSCAPE ARCHITECT FOR INTERPRETATION AND RECOMMENDATION.

B. AFTER THE AREAS HAVE BEEN DEEP RIPPED, THE FOLLOWING RATES OF SOIL AMENDMENT MATERIALS SHALL BE EVENLY SPREAD OVER ALL PLANTING AREAS AND SHALL BE THOROUGHLY SCARIFIED TO AN AVERAGE DEPTH OF SIX INCHES (6") BY ROTOTILLING A MINIMUM OF TWO ALTERNATING PASSES. AMENDMENT MUST BE INTIMATELY BLENDED WITH SOIL.

SOIL AMENDMENT: 6 CUBIC YARDS PER 1,000 SQ. FT. TO A DEPTH OF 8".
PURITY: 120 LBS. PER 1,000 SQ. FT.
SOIL SULPHUR: 10 LBS. PER 1,000 SQ. FT.
IRON SULFATE: 10 LBS. PER 1,000 SQ. FT.

FERTILIZER (COMMERCIAL) 1-10-10 SHALL BE APPLIED AT THE RATE OF 30 POUNDS PER THOUSAND SQUARE FEET AND SCARIFIED INTO THE TOP TWO INCHES (2") OF FINISH GRADE. FERTILIZER SHALL BE APPLIED AFTER LEACHING OPERATION.

C. THE THOROUGHNESS AND COMPLETENESS OF THE ROTOTILLING AND INCORPORATION OF THE SOIL AMENDMENTS SHALL BE ACCEPTABLE TO THE LANDSCAPE ARCHITECT. SLOPES 2:1 AND STEEPER, OR AS PER THE DRAWINGS, OMIT SOIL CONDITIONER APPLICATION AND TILLING.

D. DEEP WATER LEACHING AND SOIL TESTING:

DEEP WATER LEACHING SHALL BE COMPETED AS RECOMMENDED BY A CERTIFIED AGRONOMIC LABORATORY. THE FOLLOWING PROCESS FOR DEEP WATER LEACHING IS FOR BIDDING PURPOSES ONLY. ITEM NUMBER THREE (3.) SHALL BE PERFORMED AS STATED BELOW.

1. AFTER THE TILLING OPERATION, THE AREA SHALL BE DEEP WATER LEACHED THREE (3) TIMES OVER A FIVE (5) DAY PERIOD. APPLY 1/2" WATER AT EACH APPLICATION. WAIT ONE (1) DAY BETWEEN APPLICATIONS.
2. ONE DAY AFTER FINAL APPLICATION OF WATER, THE SOIL SHALL BE TESTED FOR CONTENT OF SOLUBLE SALTS (ELECTRICAL CONDUCTIVITY E.C.). THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR SHALL TAKE SEVERAL SOIL SAMPLES AND DELIVER THE SAMPLES TO A LABORATORY FOR TESTING OF SOLUBLE SALTS. E.C. TEST READING SHALL NOT BE ABOVE 2.0. THE SOIL AMENDING, TILLING AND DEEP WATERING PROCEDURE SHALL BE REPEATED UNTIL TEST READINGS ARE NOT ABOVE 2.0.
3. IF SOIL TEST READING FOR A PARTICULAR AREA TESTED IS ABOVE 2.0, THE SOIL AMENDING, TILLING AND DEEP WATERING PROCEDURE SHALL BE REPEATED UNTIL TEST READINGS ARE NOT ABOVE 2.0.

E. CARE SHALL BE TAKEN THAT THE RATE OF APPLICATION OF WATER DOES NOT CAUSE EROSION OR SLOUGHING OF SOILS.

F. ALL DEPRESSIONS, VOIDS, EROSION SCARS AND SETTLED TRENCHES GENERATED BY THE DEEP WATERING SHALL BE FILLED WITH AMENDED SOIL AND BROUGHT TO FINISH GRADE.

G. APPLY NAIAD WETTING AGENT 4 OZ. PER 1,000 SQ. FT. AT THE FIRST SPRAY OF SOIL AMENDMENTS.

**3.04 EXTERIOR PLANTER BACKFILL

A. BACKFILL FOR EXTERIOR PLANTERS: SHALL BE AS SPECIFIED IN SECTION 2.03. PRIOR TO BACKFILLING PLANTER, CONTRACTOR SHALL INSTALL "MONOLINK IRRIGATION SYSTEM" PER MANUFACTURER'S SPECIFICATIONS.

3.04 FINISH GRADING

A. FINISH GRADES SHALL BE AS INDICATED ON GRADING PLAN.

B. FINISH GRADES SHALL BE MEASURED AFTER THE GROUND HAS BEEN WATERED-IN AND MECHANICALLY COMPACTED AND SETTLED. THE FINAL GRADE SHALL BE WITHIN PLUS OR MINUS 0.1 FOOT OF THE SPOT ELEVATIONS AND GRADE LINES INDICATED ON THE CIVIL ENGINEER'S DRAWING.

C. EASE TOP AND TOE OF ALL EXISTING SLOPES.

D. ALL UNDULATIONS AND IRREGULARITIES IN THE PLANTING SURFACES RESULTING FROM TILLAGE, ROTOTILLING AND ALL OTHER OPERATIONS SHALL BE LEVELED AND FLOATED OUT BEFORE PLANTING OPERATIONS ARE INITIATED.

E. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT AND AVOID DAMAGE TO SPRINKLER HEADS, IRRIGATION LINES, AND OTHER UNDERGROUND UTILITIES DURING HIS GRADING AND CONDITIONING OPERATIONS.

F. FINAL FINISH GRADES SHALL ENSURE POSITIVE DRAINAGE OF THE SITE WITH ALL SURFACE DRAINAGE AWAY FROM BUILDINGS, WALLS, OVER MOW CURBS, AND TOWARD ROADWAYS, DRAINS AND CATCH BASINS.

G. FINAL GRADES SHALL BE ACCEPTABLE TO THE LANDSCAPE ARCHITECT BEFORE PLANTING OPERATIONS WILL BE ALLOWED TO BEGIN.

H. PLANTING SURFACES SHALL BE GRADED WITH NO LESS THAN 2 PERCENT SURFACE SLOPE FOR POSITIVE DRAINAGE.

I. ALL ROCK AND DEBRIS SHALL BE REMOVED FROM PLANTING AREAS AND THEN FROM THE SITE IN ACCORDANCE WITH THE FOLLOWING CRITERIA: 1" DIA. IN LAWN AREAS, 2" DIA. IN SHRUB AREAS, AND 2" DIA. IN HYDROSEED AREAS.

J. FINISH GRADE SHALL BE 2" BELOW FINISH PAVING SURFACE IN SHRUB AREAS.

3.05 PLANTING INSTALLATION

A. TIMING: ACTUAL PLANTING SHALL BE PERFORMED DURING THOSE PERIODS WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH LOCALLY ACCEPTABLE PRACTICE.

B. LAYOUT OF TREES: ALL TREES (24" BOX SIZE AND LARGER) SHALL BE PLACED IN THE LANDSCAPE PER THE DIRECTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. THE TREES SHALL THEN BE MOVED SO THAT PLANTING HOLES CAN BE EXCAVATED AND AMENDED. THE TREES SHALL THEN BE INSTALLED IN THEIR RESPECTIVE HOES AND POSITIONED IN THE HOLES PER DIRECTION OF THE LANDSCAPE ARCHITECT.

C. LAYOUT PLANTING: LOCATIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT. ALL CONTAINER PLANTS SHALL BE SET BY THE CONTRACTOR IN THEIR FINAL LOCATION IN THEIR RESPECTIVE CONTAINERS PRIOR TO DIGGING HOLES AND/OR PLANTING. ALL PLANT LOCATIONS SHALL BE CHECKED FOR POSSIBLE INTERFERENCE WITH EXISTING UNDERGROUND UTILITY LINES.

D. BACKFILL FOR TREES AND SHRUBS: SHALL BE AS SPECIFIED IN SECTION 2.03. IF ARTIFICIAL DRAINAGE IS REQUESTED, THEN DRAINS SHALL BE INSTALLED FIRST, THEN BACKFILLED WITH SOIL.

E. DISPOSAL OF EXCESS SOIL AND DEBRIS: ALL EXCESS EXCAVATED SUBSOIL, ROCKS AND DEBRIS SHALL BE LEGALLY DISPOSED OF OFF THE SITE BY THE CONTRACTOR AT HIS COST OR UTILIZED ON-SITE AS DIRECTED BY AND AT THE OPTION OF THE LANDSCAPE ARCHITECT.

3.06 PLANTING TREES, SHRUBS AND VINES

A. SOIL MOISTURE LEVEL PRIOR TO PLANTING SHALL BE NO LESS THAN HORTICULTURALLY ACCEPTABLE. THE CONTRACTOR SHALL REQUEST APPROVAL OF MOISTURE, AND IF FOUND TO BE INSUFFICIENT FOR PLANTING, THE PLANTING PITS SHALL BE FILLED WITH WATER AND ALLOWED TO DRAIN BEFORE STARTING ANY PLANTING OPERATIONS.

B. ALL EXCAVATED HOLES SHALL HAVE VERTICAL SIDES WITH ROUGHENED SURFACES AND SHALL BE OF THE MINIMUM SIZES INDICATED ON DRAWINGS. HOLES SHALL BE IN ALL CASES LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY OR BREAKAGE OF ROOT BALLS OR ROOTS.

C. EXCAVATION SHALL INCLUDE THE STRIPPING AND STACKING OF ALL ACCEPTABLE SOIL ENCOUNTERED WITHIN THE AREAS TO BE EXCAVATED FOR PLANT PITS AND PLANTING BEDS. PROTECT ALL AREAS THAT ARE TO BE TRUCKED OVER AND UPON WHICH SOIL IS TO BE TEMPORARILY STACKED PENDING ITS REUSE FOR THE FILLING OF HOLES, PITS AND BEDS.

D. PLANTS SHALL BE REMOVED FROM CONTAINERS IN SUCH A MANNER THAT THE BALL OF EARTH SURROUNDING THE ROOTS IS NOT BROKEN, AND THEY SHALL BE PLANTED AND WATERED IMMEDIATELY AFTER THE REMOVAL FROM THE CONTAINERS.

E. THE PLANTS SHALL BE PLANTED AT APPROVED LOCATIONS WITH THE HERETOFORE SPECIFIED AMENDMENTS AND SOIL PLANTING BACKFILL.

F. BACKFILL SHALL BE PLACED AT THE BOTTOM OF EACH HOLE AND THOROUGHLY WATERED AND COMPACTED TO A DEPTH SO THAT WHEN A PLANT IS PLACED IN THE HOLE, ITS ROOT CROWN IS SLIGHTLY ABOVE THE ESTABLISHED FINAL GRADE, AND UNLESS OTHERWISE NOTED, SHALL BE RAISED OR REPLACED AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

G. PLANTING TABLETS SHALL BE PLACED IN EACH PLANTING HOLE AT THE FOLLOWING RATES AND PER THE MANUFACTURER'S RECOMMENDATIONS:

1 - 5 GRAM TABLET PER INDIVIDUAL LINER AND FLAT-SIZE PLANT
1 - 21 GRAM TABLET PER GALLON CONTAINER
3 - 21 GRAM TABLETS PER 5-GALLON CONTAINER
4 - 21 GRAM TABLET PER 15-GALLON CONTAINER
1 - 21 GRAM TABLET PER EACH 4-INCH BOX SIZE

RANDOM TESTING TO VERIFY PLANTING TABLET INSTALLATION SHALL BE CONDUCTED BY THE OWNER'S REPRESENTATIVE.

H. NO PLANT WILL BE ACCEPTED IF THE ROOT BALL IS BROKEN OR CRACKED, EITHER BEFORE, DURING, OR AFTER THE PROCESS OF INSTALLATION.

I. ALL PLANTS SHALL BE THOROUGHLY WATERED TO THE FULL DEPTH OF EACH PLANTING HOLE IMMEDIATELY AFTER PLANTING.

K. GUYING: ALL TREES AND OTHER PLANTS INDICATED ON THE PLANS SHALL BE GUYED AS DETAILED.

L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURFACE AND SUBSURFACE DRAINAGE REQUIRED, WHICH MAY AFFECT HIS GUARANTEE OF THE TREES, SHRUBS AND VINES.

M. PRUNING AFTER PLANTING SHALL BE REQUIRED ON ALL TREES, SHRUBS AND VINES WHEN NECESSARY TO PROVIDE THE SPECIFIED OR APPROVED STANDARD SHAPES, FORM AND/OR SIZES CHARACTERISTIC FOR EACH PLANT. PRUNING MAY INCLUDE THINNING, TOPPING, AND/OR CUTTING, AND SHALL BE UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT. CUTS OVER 3/4-INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE SEALANT.

N. ALL TREES 24" BOX AND LARGER SHALL BE SPOTTED.

3.07 PLANTING GROUNDCOVER

A. GROUNDCOVERS SHALL BE PLANTED IN THE AREAS INDICATED ON THE PLANS AND SHALL BE FREE OF DERBIS AND SURFACE ROCK OVER 2" IN DIAMETER.

B. IF THE TOP FOUR INCHES (4") OF SOIL IN THE AREA TO BE PLANTED IN GROUNDCOVER IS NOT SUFFICIENTLY MOIST (HORTICULTURALLY ACCEPTABLE STANDARDS), THE AREA SHALL BE THOROUGHLY IRRIGATED AND NO LESS THAN TWELVE HOURS SHALL PASS BEFORE PLANTING.

C. GROUNDCOVER PLANTS SHALL BE GROWN IN FLATS. VARIETY INDICATED ON THE PLANT LIST. FLAT-GROWN PLANTS (ROOTED CUTTINGS) SHALL REMAIN IN THOSE FLATS UNTIL TRANSPLANTING. THE FLATS SOIL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IT WILL NOT FALL APART WHEN LIFTING THE PLANTS. PLANTS SHALL BE PROTECTED AT ALL TIMES TO PREVENT DRYING OF THE ROOT BALL.

D. GROUNDCOVERS SHALL BE PLANTED IN STAGGERED, RANDOM ROWS AND EVENLY SPACED UNLESS OTHERWISE NOTED AND AT INTERVALS CALLED OUT IN THE DRAWINGS.

E. THE SIZE OF PLANTING EXCAVATION FOR GROUNDCOVER SHALL BE AT LEAST TWICE THE DEPTH OF THE ROOT BALL.

F. EACH PLANT SHALL BE PLANTED IN A MANNER THAT WILL ENSURE MINIMUM DISTURBANCE OF THE ROOT SYSTEM, BUT IN NO CASE SHALL THIS DEPTH BE LESS THAN TWO NODES. EACH GROUNDCOVER PLANT SHALL BE PLANTED WITH ONE 5 GRAM PLANTING TABLET INCORPORATED INTO THE ROOT ZONE. PLANTING AREA SHALL BE HAND-SMOOTHED AFTER PLANTING TO PROVIDE AN EVEN AND SMOOTH FINAL FINISHED GRADE. TO AVOID DRYING OUT GROUNDCOVER, PLANTS MUST BE IRRIGATED AFTER PLANTING. THIS MAY BE DONE MANUALLY OR BY USING THE INSTALLED IRRIGATION SYSTEM. REPEATED APPLICATIONS MAY BE REQUIRED, ESPECIALLY ON A SLOPING SITE. THIS INITIAL IRRIGATION SHALL CONTINUE UNTIL A ZONE AT LEAST TWICE THE DEPTH OF EACH HOLE IS THOROUGHLY MOISTENED.

G. MAINTENANCE AND IRRIGATION:

1. MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS HIS RESPONSIBILITY TO PROVIDE A FULL COVERAGE IRRIGATION SYSTEM, BE IT EITHER AN AUTOMATIC ON-AND-OFF TIMING SYSTEM OR A MANUAL IRRIGATION SYSTEM. AFTER MOISTURE MULCH HAS BEEN APPLIED, THE MULCH SHALL BE ALLOWED TO SET FOR ONE DAY. THE SLOPES CAN THEN BE IRRIGATED. THE NUMBER OF GALLONS TO BE APPLIED TO THE SLOPES WILL VARY FROM DAY TO DAY AND SYSTEM TO SYSTEM, DEPENDING ON THE RATE OF GROWTH AND CLIMATIC CONDITIONS ENCOUNTERED. THE SOIL SURFACE MUST BE KEPT MOIST AT ALL TIMES, PARTICULARLY DURING THE SEEDING GERMINATION PERIOD.
2. ANY EROSION OR SLIPPAGE OF THE SOIL WITHIN THE DURATION OF MAINTENANCE CONTRACT CAUSED BY WATERING SHALL BE REPAIRED AS SPECIFIED.
3. ALL SLOPES SHALL BE KEPT FREE OF WEEDS AND DEBRIS DURING THE MAINTENANCE PERIOD. SUCH WEEDS AND DEBRIS SHALL BE DISPOSED OFF THE PROPERTY.
4. SLOPES SHALL RECEIVE (EVERY THIRTY (30) DAYS) AN APPLICATION OF ONE OF THE FOLLOWING FERTILIZERS DEPENDING ON THE SEASON:

SUMMER: UREA AT 1 LB/PER 1,000 SQ. FT.
WINTER: AMMONIA SULFATE AT 1.5 LB/PER 1,000 SQ. FT.

J. GUARANTEE AND REPLACEMENT:

1. GUARANTEE WILL BE MADE BY THE LANDSCAPE CONTRACTOR THAT A MINIMUM OF 80% COVERAGE WILL BE ATTAINED AT THE END OF A SIX (6) MONTH PERIOD AFTER INSTALLATION. ANY PLANTING FAILURE DURING THIS PERIOD SHALL BE RESEEDED BY THE LANDSCAPE CONTRACTOR.
2. SEEDS USED FOR REPLACEMENT SHALL BE OF THE SAME KIND AND QUANTITY RATIO AS SPECIFIED IN THE SEED FORMULA. THEY SHALL BE FURNISHED, APPLIED AND FERTILIZED AS SPECIFIED.

3.10 POST-FERTILIZATION

A. TREES: POST-FERTILIZATION SHALL OCCUR AT 100-DAY INTERVALS AFTER PLANTING. BORE HOLES AROUND DRIPLINE (VARIOUS DEPTHS). APPLY FERTILIZER AT THE RATE OF 1 LB. PER 1" CALIPER IN HOLES. FERTILIZER SHALL BE WIL-GRO 14-7-3.

B. SHRUBS: POST-FERTILIZATION SHALL OCCUR 60 DAYS AFTER PLANTING. APPLY FERTILIZER AT THE RATE OF 1 TEASPOON FOR EACH 1-GALLON PLANT AND 1 TABLESPOON PER 5-GALLON PLANT. FERTILIZER SHALL BE (14-7-3) WIL-GRO OR APPROVED EQUAL.

C. GROUNDCOVER AND LAWN AREAS: POST-FERTILIZATION SHALL OCCUR 60 DAYS AFTER PLANTING. APPLY FERTILIZER AT THE RATE OF 7 LBS/1,000 SQ. FT. FERTILIZER SHALL BE (14-7-3) WIL-GRO OR APPROVED EQUAL.

D. ALL PLANTED AREAS SHALL RECEIVE NAIAD WETTING AGENT, 4 OZ. PER 1,000 SQ. FT. 45 DAYS AFTER THE START OF THE MAINTENANCE PERIOD.

3.11 GENERAL MAINTENANCE AND ESTABLISHMENT PERIOD

A. GENERAL: MAINTENANCE OPERATIONS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL BE KEPT IN A HEALTHY, GROWING CONDITION BY WATERING, FERTILIZING, PRUNING, SPRAYING, WEEDING AND ALL OTHER NECESSARY OPERATIONS OF MAINTENANCE. ALL AREAS SHALL BE KEPT FREE OF WEEDS AND NOXIOUS GRASSES AND CLEAN AND FREE OF ROCKS, CLODS, AND DEBRIS. ALL PAVING AND WALKS SHALL BE KEPT CLEAR, CLEAN AND WASHED DOWN.

B. ESTABLISHMENT PERIOD FOR TREES, SHRUBS, VINES AND GROUND COVERS: THE ESTABLISHMENT PERIOD SHALL BEGIN ON THE DATE THAT THE CONTRACTING OFFICER INSPECTS AND GIVES WRITTEN PROVISIONAL ACCEPTANCE OF THE WORK AND SHALL BE NINETY (90) CALENDAR DAYS. THE ESTABLISHMENT PERIOD MAY BE EXTENDED OR SHORTENED AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.

C. MAINTENANCE OPERATIONS: PLANTS SHALL BE KEPT IN A HEALTHY, GROWING CONDITION BY WATERING, PRUNING, MOWING, RESEEDING, ROLLING, RE-SODDING, TRIMMING, EDGING, FERTILIZING, RE-STAKING, PEST CONTROL, SPRAYING, WEEDING AND ALL OTHER NECESSARY OPERATIONS OF MAINTENANCE. PLANTING BEDS SHALL BE KEPT FREE OF WEEDS, GRASS AND OTHER UNDESIRED VEGETATIVE GROWTH, AND LAWN AREAS SHALL BE KEPT FREE FROM ALL WEEDS. DURING THE SPECIFIED MAINTENANCE PERIOD, ALL PLANTS THAT ARE DEAD OR SEVERELY DISTRESSED SHALL BE REPLACED IMMEDIATELY. ALL SEASONAL COLOR, ANNUALS OR PERENNIALS SHALL BE MAINTAINED IN A VIGOROUS, HEALTHY CONDITION THROUGH THE MAINTENANCE PERIOD.

D. EXTENDED MAINTENANCE: WHEN, IN THE OPINION OF THE LANDSCAPE ARCHITECT, THERE IS IMPROPER MAINTENANCE, POOR OR UNHEALTHY CONDITION OF PLANT MATERIALS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL MAINTENANCE OF THE WORK AT NO ADDITIONAL COST TO THE CONTRACT UNTIL ALL WORK IS ACCEPTABLE.

E. PROTECTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION OF ALL PLANTING AREAS AGAINST TRAFFIC OR OTHER USE BY ERECTING FENCING OR OTHER ACCEPTABLE MEANS IMMEDIATELY AFTER THE PLANTING IS COMPLETED. WARNING SIGNS AND BARRICADES SHALL BE PLACED IN VARIOUS HIGH-TRAFFIC AREAS. DAMAGED AREAS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR.

F. WEEDING AND CULTIVATING: ALL TREE, SHRUB, GROUNDCOVER AND HYDROSEEDED AREAS SHALL BE KEPT FREE OF DEBRIS AND WEEDS. GROUNDCOVER AND SHRUB AREAS SHALL BE CULTIVATED AT INTERVALS OF NOT MORE THAN FOURTEEN (14) DAYS MINIMUM.

G. REPLACEMENT: DURING THE MAINTENANCE PERIOD, PLANTS THAT DIE OR THAT ARE IN AN UNHEALTHY OR BADLY IMPAIRED CONDITION SHALL BE REPLACED BY THE CONTRACTOR WITHIN FOURTEEN (14) DAYS AFTER UNSATISFACTORY CONDITION IS EVIDENT. NO REPLACEMENT OF PLANTINGS SHALL BE MADE IN ANY SEASON DEFINITELY UNFAVORABLE FOR PLANTING. AT THE CONCLUSION OF THE MAINTENANCE PERIOD, THE LANDSCAPE ARCHITECT WILL MAKE AN INSPECTION OF THE WORK TO DETERMINE THE CONDITION OF ALL PLANTS. ALL UNHEALTHY PLANTS SHALL BE REMOVED FROM THE SITE AND REPLACED WITH PLANTS OF THE SAME KINDS AND SIZES AS ORIGINALLY SPECIFIED. SUCH REPLACEMENT SHALL BE MADE IN THE SAME MANNER AS SPECIFIED FOR THE ORIGINAL PLANTING AND AT NO EXTRA COST TO THE OWNER.

H. ACCEPTANCE: AT THE CONCLUSION OF THE MAINTENANCE PERIOD, AN INSPECTION SHALL BE MADE BY THE LANDSCAPE ARCHITECT, UPON WRITTEN NOTICE REQUESTING INSPECTION BEFORE ACCEPTANCE. THE MAINTENANCE PERIOD SHALL CONTINUE UNTIL ALL DEFICIENCIES ARE CORRECTED.

20180529 BIDSET

LICENSED LANDSCAPE ARCHITECT
JAMES P. BENEDETTI
Signature
Ren Date 9/30/18
Date 5/21/18
STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

L-12

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 12

CITY OF OCEANSIDE
ENGINEERING DIVISION

16 SHEETS

PLANTING SPECIFICATIONS

TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:

PLAN NUMBER
L18-00001

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 18-010-028 **CLIENT NO:** 1358

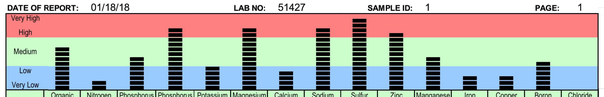
SEND TO: GRO-POWER INC
15065 TELEPHONE AVENUE
CHINO, CA 91710-9614

SUBMITTED BY:

GROWER: TCMC PARKING STRUCTURE 2017-29

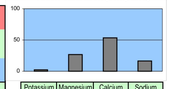
Graphical Soil Analysis Report

DATE OF REPORT: 01/18/18 **LAB NO:** 51427 **SAMPLE ID:** 1 **PAGE:** 1



Analyte	Organic Matter %	Nitrogen NO_3-N ppm	Phosphorus Weak Bray ppm	Phosphorus $NaHCO_3$-P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	Sodium Na ppm	Sulfur SO_4-S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Chloride Cl ppm
Results	3.5	5	21	26	165	669	2196	773	194	5.6	7	8	0.5	1.0	

Percent Cation Saturation (computed)



Potassium K %	Magnesium Mg %	Calcium Ca %	Sodium Na %
2.1	26.8	53.3	16.4

ACIDIC BASIC

ECe dS/m	CEC meq/100g	Ex. Lime	pH
8.0	20.5	L	6.9

LOW AVERAGE HIGH — INCREASING SALINITY

INCREASING NEED FOR LIME — Buffer pH:

Soil Fertility Guidelines

CROP: LANDSCAPE **RATE:** lb/1000 sq ft **NOTES:**

Dolomite (70 score)	Lime (70 score)	Gypsum	Elemental Sulfur	Nitrogen N	Phosphate P_2O_5	Potash K_2O	Magnesium Mg	Sulfur SO_4-S	Zinc Zn	Manganese Mn	Iron Fe	Copper Cu	Boron B	
		200		3.4	1.0	3.5								

COMMENTS

MAINTENANCE: Split the above amount over the year at a time according to local conditions and requirements. Choose a source that best fits this combination and avoid applications in winter.
PRIOR TO PLANTING: Spread the above requirements per 1,000 sq ft and mix into the top 6-8 inches of soil. Initially, limit Nitrogen to 1.5 lb/1,000 sq ft.& apply the N-Balance during grow season!
SOLUBLE SALTS: "High" (H or VH) levels need to be avoided if growth is not to be affected. Avoid further fertilization until this can be addressed. You may want to re-sample.
SODIUM: If a concern, broadcast amendment and incorporate if possible. Follow with frequent/heavy watering to aid in the amending (but check water quality first and avoid leaching nitrates).

Rogell Rogers, CCA, PCA
A & L WESTERN LABORATORIES, INC

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 18-010-028 **CLIENT:** 1358

SUBMITTED BY:

SEND TO: GRO-POWER INC
15065 TELEPHONE AVENUE
CHINO, CA 91710-9614

GROWER: TCMC PARKING STRUCTURE 2017-29

DATE OF REPORT: 01/18/18

SOIL PHYSICAL CHARACTERISTICS

PAGE: 1

Sample ID	Lab Number	% Sand	% Silt	% Clay	Soil Texture	Moisture @ 1/3 Bar	Moisture @ 15 Bar	Available Water %
1	51427	75	10	15	SANDY LOAM			

NOTES:

Rogell Rogers, CCA, PCA
A & L WESTERN LABORATORIES, INC.

20180529 BIDSET

INTERPRETATION OF ANALYSIS

NAME: JPBLA, Inc. **LAB NO.: 51427** **DATE: 01/18/18**

PROJECT: TCMC Parking Structure

Page 1 of 2

TEXTURES*		
[ ] SANDY SOILS	[X] LOAM SOILS	[ ] CLAY SOILS
Coarse textured, low water retention, infertile; fertilizer leaches easily and needs frequent irrigation. Organic matter benefits water and nutrient retention.	Have desirable properties of clay and sand, good moisture and fertilizer retention, not too sticky or droughty.	Sticky: high water retention, slow water penetration, compacts easily; high fertilizer retention. Need organic matter to keep workable.
Sand, Loamy Sand	Sandy Loam, Loam, Silt Loam, Silty Clay Loam, Sandy Clay Loam, Clay Loam	Sandy Clay, Silty Clay, Clay

***Texture estimate derived from CEC value. For more precise texture information, further testing is required. Contact lab for information.**

LIME (amount of solid lime distributed in soil)		
[ ]	HIGH	Plants sensitive to "Lime-induced Iron Chlorosis", (i.e. azalea, gardenia, liquid amber, roses, etc.) must have corrective chemical added to soil.
[ ]	MODERATE	Plants sensitive to "Lime-induced Iron Chlorosis", affected but not as severely as "high" readings. Corrective chemical may be added.
[X]	LOW	Plants sensitive to "Lime-induced Iron Chlorosis", not affected. No corrective chemical needed.

pH	
6.9	Normal pH values for this area vary from 6.5 to 8.0, however variations in either direction may exist. Soil amendments may be recommended to help bring the soil pH into a more optimal range. To lower pH, soil sulfur or an equivalent acid-forming chemical recommended. To raise pH, lime is usually recommended.

EC			BORON (ppm)		
Electrical Conductivity of the soil saturation extract is a measure of the total salts in the soil. This can be related to plant growth as follows: (Units are mmhos/cm @ 25 degrees C)			Is expressed as ppm in the saturation extract. A small amount of boron is essential for plant growth, but a concentration slightly above the optimum is toxic for plants.		
[ ]	0 – 1.9	No damage from salts.	[ ]	0.0 - .6	Not toxic for any, but may be too low for some.
[ ]	2 - 3.9	Sensitive plants may be damaged.	[X]	.7 - 1.4	Sensitive plants restricted.
[ ]	4 - 7.9	Many plants affected.	[ ]	1.5 - 4.9	Many plants restricted.
[X]	8 - 16	Most plants damaged.	[ ]	5.0 - 10.0	Only tolerant plants satisfactory.
[ ]	over 16	Few plants survive.	[ ]	10.0 - over	Few plants survive.

 Rev. 8/04

Page 2 of 2 **PROJECT: TCMC Parking Structure** **LAB NO.: 51427**

PERCENT SODIUM SATURATION		
Is the degree to which the soil exchange complex is saturated with sodium. Exchangeable sodium has two effects: (1) Reduced permeability and (2) Toxicity of sensitive plants.		
[ ]	Below 5	Generally no permeability problem due to sodium. However, sodium sensitive plants may show leaf burn.
[ ]	5 - 15	Possible permeability problems with clay loams and clays. (C.E.C. 15 – 30)
[X]	Above 15	Permeability problems are likely on all mineral soil except some sands and loam sands.

NUTRIENTS						
NITROGEN (N)	[X]	LOW	[ ]	MODERATE	[ ]	HIGH
PHOSPHORUS (P_2O_5)	[ ]	LOW	[X]	MODERATE	[ ]	HIGH
POTASSIUM (K_20)	[X]	LOW	[ ]	MODERATE	[ ]	HIGH
	Definite need for fertilizer nutrient add at recommended rate for plant soil in question		Fertilizer nutrients are present in adequate amounts; maintain at this level.		There is no need for adding fertilizer nutrients at this time.	

ORGANIC MATTER (Percent as designated on the soil analysis)*		
[ ]	VERY LOW	0.0 – 0.7
[ ]	LOW	0.8 – 1.7
[ ]	MODERATE	1.8 – 3.2
[X]	HIGH	3.3 – 4.2
[ ]	VERY HIGH	4.3 – …….
*Variables may exist depending upon the soil type and the source of organic matter that is being measured, however the above table will give a good estimate of the percentage of organic matter present.		

WATER PERCOLATION RATE		(INCHES/HOUR)*
[ ]	VERY RAPID	MORE THAN 20.00
[ ]	RAPID	6.00 – 20.00
[X]	MODERATELY RAPID	2.00 – 6.00
[ ]	MODERATE	.60 – 2.00
[ ]	MODERATELY SLOW	.20 - .60
[ ]	SLOW	.06 - .20
[ ]	VERY SLOW	LESS THAN .06
*Variables may exist depending upon the soil type and the source of organic matter that is being measured, however the above table will give a good estimate of the percentage of organic matter present.		

Percolation rate is an estimate derived from texture. For more specific rates, further testing is required. Contact lab for information.

SOIL ANALYSIS RECOMMENDATIONS

January 19, 2018

JPBLA, Inc.
4403 Manchester Ave. #201
Encinitas, CA 92024
Attn: Jim

Project Name: TCMC Parking Structure **Project Number: 2017-29**

The following recommendations are based on the results of soil analysis and soil texture test #51427 from A & L Western Agricultural Laboratories dated January 18, 2018.

SOIL PREPARATION:

Materials recommended per 1,000 square feet
150 lbs. Gro-Power® Plus
200 lbs. agricultural gypsum
2 cu. yd. of nitrolized shavings or good quality compost

Initially cross rip to a depth of 10 – 12 inches and thoroughly leach. Then apply recommended materials and rototill a minimum of two directions, to a depth of 4-6 inches. After soil preparation, but prior to planting, irrigate with overhead irrigation so that a minimum of 4-6 inches of good quality water passes through the soil profile, beyond the root zone. Drainage is critical.

BACKFILL:

Materials recommended per cubic yard of mix
70% native on site soil, by volume
30% nitrolized shavings or good quality compost
12 lbs. Gro-Power® Plus
20 lbs. agricultural gypsum
Gro-Power® Planting Tablets for extended feed/conditioning

Dig planting pits 1½ times the width and 1 time the depth of the root ball. Fill pits with backfill mix to the depth of the root ball and irrigate thoroughly. Be sure entire root ball area is covered when planting.

**Specialty plants may require special backfill mix and planting instructions.

GRO POWER® INC.
15065 TELEPHONE AVENUE CHINO, CA 91710-9614 • (909) 393-3744 • FAX (909) 393-2773
www.gropower.com • e-mail:gropowerinc@verizon.net

Page 2
January 19, 2018
JPBLA, Inc.
Project Name: TCMC Parking Structure **Project Number: 2017-29**

MAINTENANCE:

Initially feed with 20 lbs. Gro-Power® Plus per 1,000 sq. ft. on day 45 and 85. Thereafter, feed with same product at same rate every 8 to 12 weeks, depending on usage and/or desired level of maintenance. You might consider alternating with a balanced chemical fertilizer, so that ½ to 1 lb. of nitrogen is applied per 1,000 sq. ft. or, Gro-Power® Premium Hi-Nitrogen (18-3-7/ER) at 8 ½ lbs. per 1,000 sq. ft.

- Gro-Power® Flower 'N' Bloom (3-12-12) at 20 lbs. per 1,000 sq. ft. is an excellent product for color and blooming plants.
- See enclosed Long Term Maintenance Schedule for more specific recommendations.

EVALUATION OF SOIL ELEMENTS:

1. pH is SLIGHTLY LOW, indicating slightly acidic soil and within optimum range for most plant material.
2. Lime level is LOW. No problem for most plant material.
3. EC (soluble salts) is VERY HIGH. Leaching will help to lower levels over time.
4. Boron is MODERATELY ELEVATED. Leaching and a good irrigation program will help to maintain lower boron levels in root zone.
5. Exchangeable sodium and magnesium are HIGH. Drainage may be affected and potassium uptake could be inhibited. Addition of gypsum in soil preparation may aid in mitigating any problems due to excess sodium and magnesium.
6. Major nutrients: Nitrogen is LOW - Phosphorus is MODERATE - Potassium is LOW. Gro-Power® products used at specified rates will provide adequate major and micronutrients for plant establishment and vigorous growth.

SPECIAL COMMENTS:

1. Selective plant palette important, re: Salinity, elevated boron, elevated sodium.
2. A good leaching/irrigation program is important to site. (If leaching to reduce boron, you might first check with your local water district to make sure the boron level in the water is not elevated. No point in attempting to leach out boron with water that is elevated in boron.)
3. Amendments are more effective when thoroughly mixed into the soil.
4. When planting native plant material, you might consider reducing backfill specifications for Gro-Power® Plus to 6 – 8 lbs. per cubic yard of mix.

Thank you for giving Gro-Power®, Inc. the opportunity to make recommendations on this project. If I may be of further assistance to you, or you have any questions regarding the above stated recommendations, please don't hesitate to contact me at (562) 754-0415.

Sincerely,

Jack L. Engberg

Soil Analysis Consultant

JE/jma

L-13

LICENSED LANDSCAPE ARCHITECT — Signature — Ren. Date — STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 13 | CITY OF OCEANSIDE ENGINEERING DIVISION | 16 SHEETS

SOIL MANAGEMENT REPORT
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:

PLAN NUMBER L18-00001

Long-term maintenance schedule

Turf

Feed turf areas with **Gro-Power® Plus 5-3-1** or **Gro-Power® Plus 5-3-1 w/M** at 20 – 25 lbs. per 1,000 sq. ft. at 8-12 week intervals. **Gro-Power® Premium Hi-Nitrogen 18-3-7 / ER** at 8 ½ lbs. per 1,000 sq. ft. can be alternated with **Gro-Power® Plus 5-3-1**during the cool season.

Aerify turf areas a minimum of two (2) times per year. Vertical mow or aerify during end of March or first of April, or at the end of October. Feed after aerifying or verticutting.

Pre-emergenents: Use pre-emergenents starting mid-January to mid-March and post-emergence starting mid-May to the end of September. It is best to use **Gro-Power®** products after applying herbicide. Use herbicide per manufacturers directions and licensed applicator/advisor.

Trees

Apply ½ lb. **Gro-Power® Plus 5-3-1** or **Gro-Power® Plus 5-3-1 w/M** for every inch of caliper measured 14" above the soil level. For trees within ground cover areas, work into soil lightly around drip line and water thoroughly.

Turf areas: Turf applications should be sufficient to feed younger trees.

Deep root feedings: Auger holes around the drip line for deep root feeding to enhance plant growth for older trees or problem soil areas. Make holes 18 to 24 inches apart. Use **Gro-Power® Plus 5-3-1** per above directions as to the amount and divide by the number of holes you are going to fill. Before inserting **Gro-Power®** in holes, mix with an equal amount of sand and insert that mixture. Irrigate immediately and thoroughly.

Feed all trees 3 times per year.

PALM TREES & TROPICALS

Palm and other tropical plants have unique requirements in our western soils. Feed with **Gro-Power® Palm & Tropical 9-3-9** at the rate of 1/3 cup per 1 foot of trunk height on palm trees. In tropical plant beds, feed at the rate of 15-25 lbs. per 1,000 sq. ft. Feed every 3-4 months.

PLANTS IN CONTAINERS

FEEDING POTS AND CONTAINERS WITH GRO-POWER® 5-3-1:
Feed during the growing season every 45 days.

1 cup = approximately 8 ounces

4" Pot…… ¼ level teaspoon
6" Pot…… ½ level teaspoon
8" & 1 Gal. Can ……1 level teaspoon
2 Gal. Can …….. 1½ teaspoons
5 Gal. Can ……..2 Tablespoons
15 Gal. Can …… ½ cup
24" Box……1 cup
30" Box ……1 ½ cups
36" Box……2 ½ cups
42" Box……3 cups
48" Box……4 cups
60" Box ……8 cups
Soil Plant Mix 8 oz. of **Gro-Power®** per cubic foot of mix.

Gro-Power® Planting Tablets can be substituted for more convenient, long-term feeding. See Specifications on **Gro-Power® Planting Tablets**.

For long-term feeding, apply one of **Gro-Power®'s three Controlled Release 12-8-8 formulations** at the rate of two (2) tablespoons per each foot of height or width of plant around surface of pot. Feed at interval recommendations per formulation. Reduce the **Gro-Power® Controlled Release** rate by half on sensitive and delicate plants, or use **Gro-Power® Planting Tablets.**

To prevent and correct trace mineral deficiencies, supplement per directions with **Premium Green® Iron, Premium Green® Magnesium, Premium Green® Manganese** or **Premium Green® Micro-Balance®.**

Roses

ESTABLISHED PLANTS:

PLANT SIZE	LIGHT FEEDING	HEAVY FEEDING
Miniature Roses	1-2 tsp.	----------
New & Small Plants (1'-2')	2 Tbsp.	¼ cup (2 oz.)
Medium Plants (2'-4')*	¼ cup (2 oz.)	1/3 cup (3oz.)
Large Plants (4'+)*	1/3 cup (3 oz.)	½ cup (4 oz.)

**For upright, climbing & tree roses, this represents the height. For trailing and carpet roses this represents the width.*

Begin applying **Gro-Power® Premium Rose Food 6-8-4** after first growth appears in early Spring and apply every 30-40 days during growing season with final application in Fall. Spread evenly over soil under each plant and water thoroughly after each application.

BARE ROOT ROSES: Put 2 Tbs. of **Gro-Power® Premium Rose Food 6-8-4** in bottom of hole. Cover with 1-2 inches of soil. Install plant and back fill hole with soil. Scatter 2 Tbs. of Rose Food around plant and water thoroughly.
NOTE: Consider adding 4-5 Gro-Power® Planting Tablets in hole for long term feeding.

Acid-loving plant S

So-called "Acid-Loving" plants include Azaleas, Camellias, Rhododendrons, Gardenias and Clematis. Feed with **Gro-Power® Premium Azalea-Camellia-Rhododendron Food 6-4-4**.

For feeding your entire garden, apply 2 lbs. (about 4 cups) per 100 sq. ft. Feed 4 times annually. Water thoroughly after each application. Consider supplementing with **Gro-Power® Premium Green Iron (40% Fe)** to help prevent and correct extreme chlorosis.

GARDEN PLANTS	CONTAINER PLANTS
1-2 Ft. ……¼ cup	6" Pot/1 Gal…… ½ tsp.
2-3 Ft. …… 1/3 cup	8" Pot/2 Gal…… 1 tsp.
3-4 Ft. …… ½ cup	10" Pot/3 Gal…….. 1 Tbs.
4-6 Ft. …… ¼ cup	12" Pot/5 Gal…… 2 Tbs.
6 Ft. + …… 1-2 cups	14" Pot/7 Gal…….. ¼ cup
	16" Pot/15 Gal…… ½ cup

CITRUS, AVOCADO, FRUIT & NUT TREES

Feed with **Gro-Power® Premium Citrus-Avocado Food 8-6-8** or **Premium Fruit Nut & Vine Food 8-6-8**.

CITRUS, AVOCADO, NUT and other FRUIT TREES

TREE HEIGHT	TRUNK DIAMETER	RATE
New – 4"	1" – 1 ½"	1 cup
4' – 6'	1 ½" – 2"	1 ½ cups
6' – 8'	2" – 2 ½"	2 cups
8' – 10'	2 ½" – 4"	3 cups
10' +	4" +	4-5 cups

Spread evenly around drip line of tree and water thoroughly. Feed 3-4 times per year.

BERRY BUSHES, GRAPE VINES, ETC….

NEW – SMALL	MEDIUM	LARGE
¼ cup	½ - 1 cup	1 ½ - 2 cups

Spread evenly around plant and water thoroughly. Feed 3-4 times annually.

CONTAINERS

1 GALLON	5 GALLON	7 GALLON	15 GALLON
1 tsp.	2 Tbs.	3 Tbs.	1/3 cup

Feed every 2-3 months. Water thoroughly.

GENERAL LANDSCAPE
Use for general landscape at the rate of 10-16 lbs. per 1,000 sq. ft.

Shrubs, ground cover, perennial plants & flowers

Feed 2-3 times a year with **Gro-Power® Plus 5-3-1** at 20 lbs. per 1,000 sq. ft., or individually as follows:

Small plants…….. 3 tablespoons to ¼ cup
Medium plants…….. ¼ cup to ½ cup
Large plants…….. ½ to 1 cup

1 cup equals approximately 8 ounces

FEED SPRING, SUMMER AND FALL

Feed with **Gro-Power® Flower'N'Bloom 3-12-12** when buds have formed and until the plant is finished blooming at approximately 4-week intervals. Then feed after blooming with **Gro-Power® Plus 5-3-1** at same rates monthly until August. Feed once more in early Fall with **Gro-Power® Flower'N'Bloom 3-12-12** at same rate. To prevent or correct yellowing due to iron chlorosis, supplement with feedings of **Gro-Power® Premium Green Iron (40% Fe)** at the rate of 5 lbs. per 1,000 sq. ft., 2-3 times annually or as needed.

SEASONAL FLOWERING ANNUALS

Apply **Gro-Power® Flower'N'Bloom 3-12-12** monthly at the rate of 20 lbs. per 1,000 sq. ft. When planting annual flowerbeds during the year, prepare soil by mixing 3 cu. yds. of planter mix, nitrolized shavings or equal and 200 lbs. of **Gro-Power® Plus 5-3-1** per 1,000 sq. ft. and rototill into top 6-8 inches of soil. After planting, one month later, begin feeding with **Gro-Power® Flower'N'Bloom 3-12-12** as before.

SLOPE AREAS

Feed 2-3 times annually with **Gro-Power® Plus 5-3-1** at the rate of 25 lbs. per 1,000 sq. ft. alternating with **Gro-Power® Premium Hi-Nitrogen 18-3-7 /ER** at 8½ lbs. per 1,000 sq. ft.

In areas where access is limited, scatter **Gro-Power® Toss'n'Gro 8-8-8** over the area of slope at the rate of 17-20 lbs. per 1,000 sq. ft. for long-term feeding and soil conditioning. For an alternative, use one of **Gro-Power®**'s three Controlled Release formulations.

FOR TREES ON SLOPE SEE "TREES" SECTION. USE INDIVIDUAL FEEDING AND/OR DEEP ROOT FEEDING.

General notes

We suggest a soil analysis be taken annually from the site so adjustments can be made in the program.
In areas where replanting is necessary, incorporate 2-3 yards of planting mix, nitrolized shavings or equal and 150-200 lbs. of **Gro-Power® Plus 5-3-1** per 1,000 sq. ft. before planting new plant material, turf, etc.

Sole Manufacturer
GRO-POWER®, INC.
Est. 1966
15065 Telephone Avenue • Chino, California U.S.A. 91710-9614
(909) 393-3744 • Fax (909) 393-2773 • (800) 473-1307
www.gropower.com - email: gropowerinc@verizon.net

PRODUCT OF U.S.A.

 Rev. 6/06

L-14

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

SHEET 14 | CITY OF OCEANSIDE ENGINEERING DIVISION | 16 SHEETS

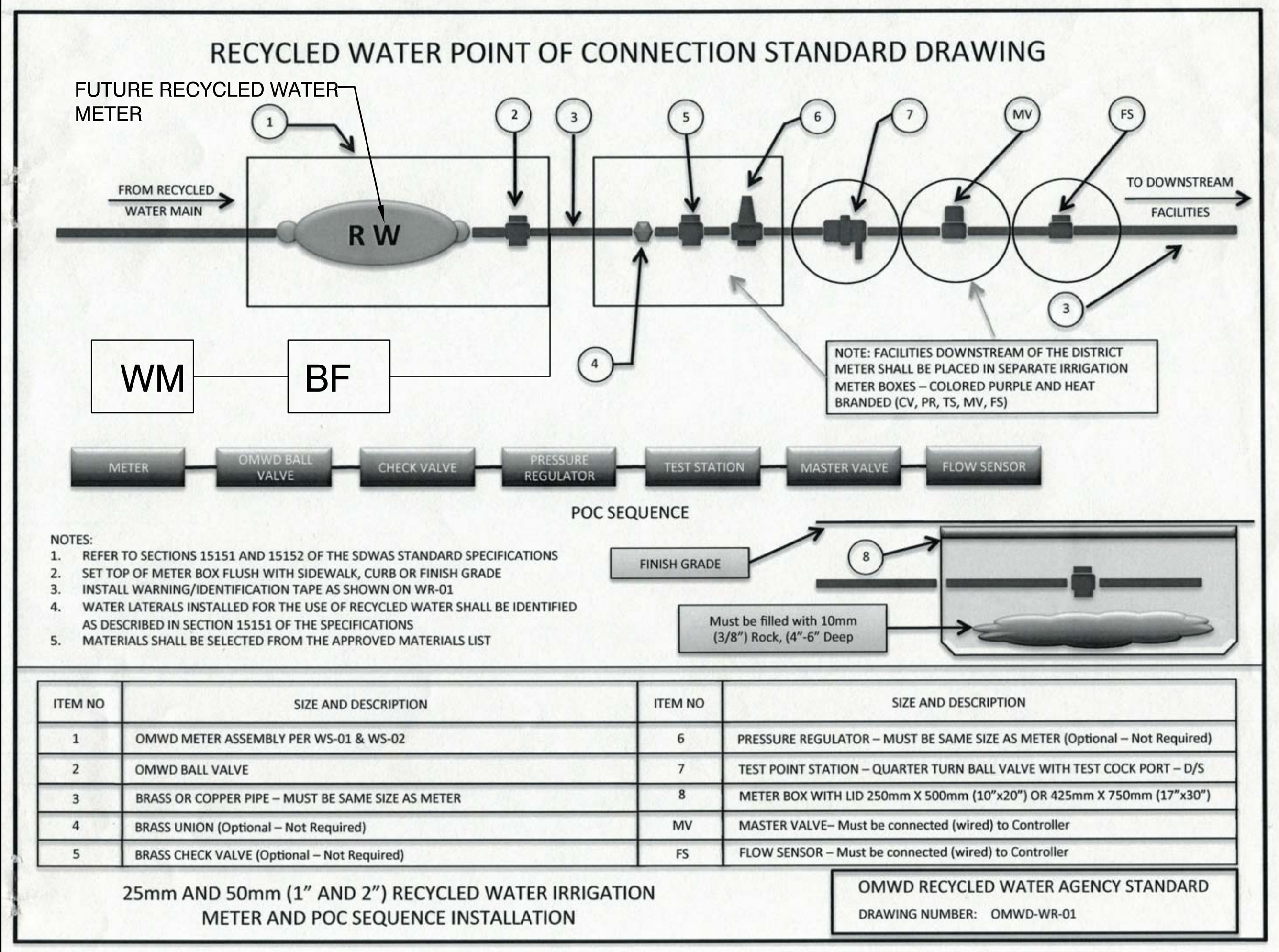
SOIL MANAGEMENT REPORT
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

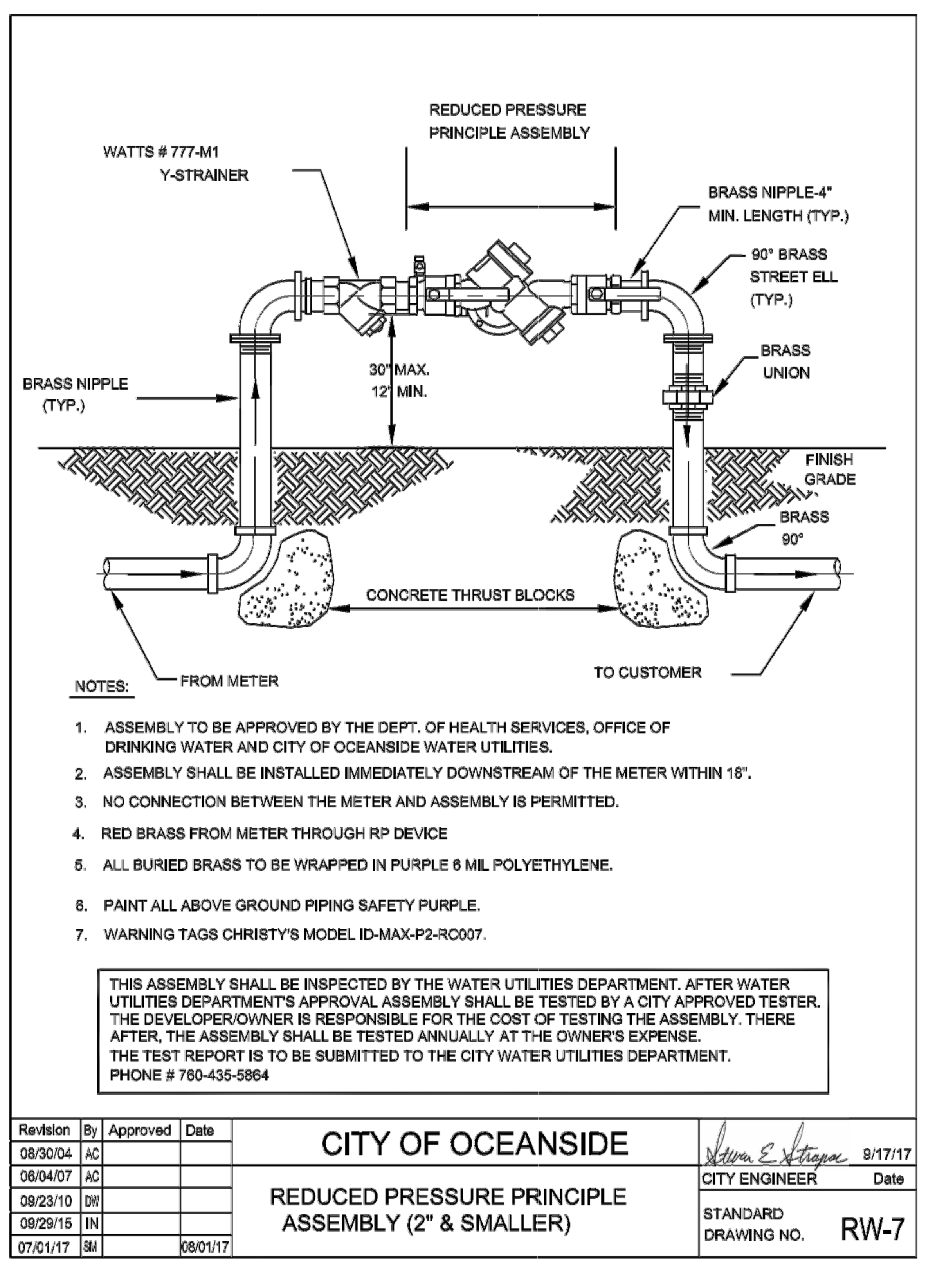
LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058

Checked By:
Approval Date:
PLAN NUMBER L18-00001

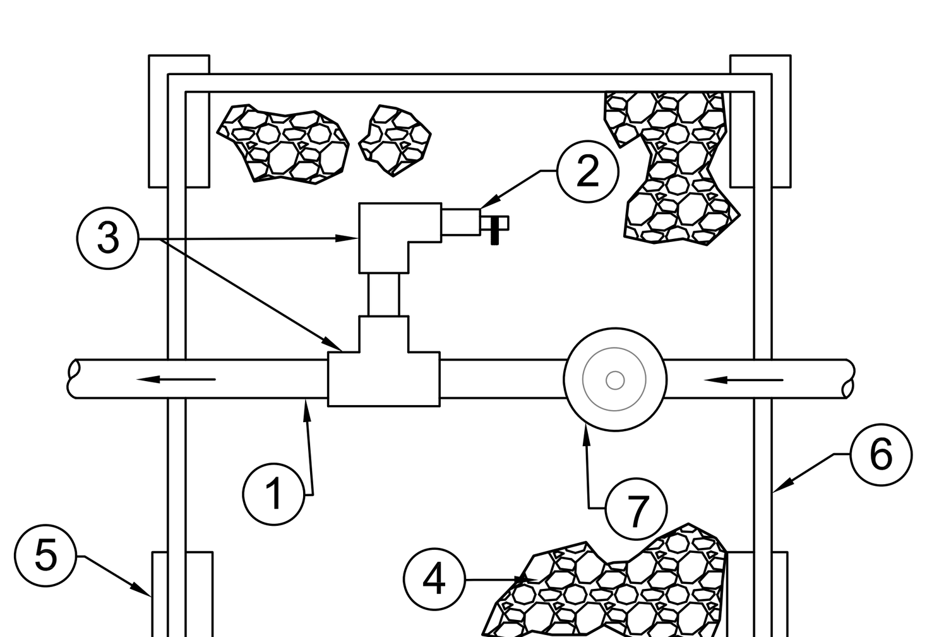
20180529 BIDSET



(A) CROSS CONNECTION TEST LOCATION N.T.S



(C) BACKFLOW PREVENTOR N.T.S



(1) MAINLINE
(2) BALL VALVE WITH 1/4" FEMALE THREAD
(3) PVC SCH. 40 SOLVENT WELD FITTINGS
(4) 3/8" DIA. PEA GRAVEL SUMP (MIN. 1/2 CU. FT.)
(5) BRICK SUPPORTS ON COMPACTED/ UNDISTURBED SUBGRADE (MIN. OF FOUR PER BOX)
(6) PURPLE COLOR VALVE BOX AND LID (SEE SPECIFICATIONS)
(7) PRESSURE REGULATING VALVE

* ONLY ON TEST STATIONS DOWNSTREAM OF THE METER

(B) TEST STATION N.T.S

IRRIGATION 02810-11 SECTION 02810
IRRIGATION PART 1 - GENERAL
1.01 GENERAL CONDITIONS:
A. THE GENERAL CONDITIONS, SPECIAL CONDITIONS, AND DIVISION 1 ARE AN ADDED PART OF THIS SECTION AND THE CONTRACT FOR THIS WORK AND APPLY TO THIS SECTION AS FULLY AS IF REPEATED HEREIN.
1.02 SCOPE:
A. THE WORK INCLUDES ALL SERVIU
ES, LABOR, MATERIALS, TRANSPORTATION AND EQUIPMENT NECESSARY TO PERFORM THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED. THE GENERAL CONDITIONS AND DIVISION 1 APPLY TO THIS SECTION AS FULLY AS IF REPEATED HEREIN.
1. RELATED WORK:
(A) LANDSCAPING SECTION (02900)
1.03 SUBMITTALS:
A. SUBMIT A LIST OF ALL IRRIGATION EQUIPMENT TO BE USED, MANUFACTURER'S BROCHURES, MAINTENANCE MANUALS, GUARANTEES AND OPERATING INSTRUCTIONS.
1.04 GUARANTEE:
A. FURNISH GUARANTEE IN ACCORDANCE WITH THE GENERAL CONDITIONS, FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE - AT THE CONCLUSION OF THE MAINTENANCE PERIOD - ON COMPLETE WATER IRRIGATION SYSTEM, INCLUDING NONSETTLING OF THE BACKFILL IN TRENCHES WHICH, IF OCCURS, SHALL BE CORRECTED, INCLUDING REPAIRS AND/OR REPLACEMENT OF ANY MATERIAL DAMAGED THEREBY OR THEREFROM.
1.05 OBSERVATION:
A. IN ALL CASES WHERE OBSERVATION OF THE SPRINKLER SYSTEM WORK IS REQUIRED AND/OR WHERE PORTIONS OF THE WORK ARE SPECIFIED TO BE PERFORMED UNDER THE DIRECTION AND/OR OBSERVATION OF THE ARCHITECT OR HIS REPRESENTATIVE, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AT LEAST THREE (3) WORKING DAYS IN ADVANCE OF THE TIME SUCH INSPECTION AND/OR DIRECTION IS REQUIRED.
B. OBSERVATION WILL BE REQUIRED FOR THE FOLLOWING PARTS OF THE WORK:
1. UPON INSTALLATION AND TESTING OF MAIN LINES AND LATERAL LINES; WHEN PIPES ARE LAID AND ARE TO BE SUBMITTED TO PRESSURE TESTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN OBSERVED AND APPROVED.
2. UPON INSTALLATION AND TESTING OF VALVES, QUICK COUPLERS, BACKFLOW PREVENTER DEVICE, AUTOMATIC CONTROLLERS, AND CONTROL VALVES AND WIRES.
3. WHEN THE SPRINKLER SYSTEM IS COMPLETED, THE CONTRACTOR, IN THE PRESENCE OF THE ARCHITECT, SHALL PERFORM A COVERAGE TEST TO DETERMINE IF THE COVERAGE OF WATER AFFORDED THE LAWN AND PLANTING AREAS IS COMPLETE AND ADEQUATE. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES TO COVER.
4. FINAL OBSERVATION AND PERFORMANCE TEST SHALL BE AT THE SAME TIME AS THE FINAL OBSERVATION OF THE LANDSCAPE WORK.
1.06 TESTING: ALL PVC MAIN SHALL BE SUBJECTED TO A PRESSURE TEST OF 125 PSI FOR A PERIOD OF FOUR HOURS. ALL TESTING SHALL BE IN THE PRESENCE OF THE ARCHITECT. APPROVAL SHALL BE RECEIVED BEFORE BACKFILLING ANY TRENCH. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN OBSERVED AND APPROVED. 1.07 RECORD DRAWINGS:
A. BEFORE FINAL ACCEPTANCE OF WORK, THE CONTRACTOR SHALL PROVIDE A RECORD SET OF DRAWINGS SHOWING THE SPRINKLER SYSTEM WORK.
1. ANY CHANGES IN LOCATION OF ITEMS OR TYPE OF INSTALLATIONS FROM THAT SHOWN ON DRAWINGS SHALL BE SO INDICATED ON THE RECORD DRAWINGS.
2. VALVES SHALL BE NUMBERED AND CORRESPONDING NUMBERS SHALL BE SHOWN ON THE RECORD DRAWINGS.
3. ALL REMOTE CONTROL VALVES, SHUT-OFF VALVES, QUICK COUPLER VALVES SHALL BE LOCATED BY MEASURE DIMENSIONS. DIMENSIONS SHALL BE GIVEN TO PERMANENT OBJECTS AND SHALL BE TO THE NEAREST ONE-HALF FOOT.
4. ON THE INSIDE SURFACE OF THE COVER OF EACH AUTOMATIC CONTROLLER, PREPARE AND MOUNT A CHART SHOWING THE VALVES AND SPRINKLER HEADS SERVICED BY THAT PARTICULAR CONTROLLER. ALL VALVES SHALL BE NUMBERED TO MATCH THE OPERATION SCHEDULE AND THE DRAWINGS AND SHALL BE COLOR CODED FOR EACH SEPARATE AREA SERVICED BY EACH VALVE. ONLY THOSE AREAS CONTROLLED BY THE CONTROLLER SHALL BE SHOWN. THIS CHART SHALL BE A PLOT PLAN, ENTIRE OR PARTIAL, SHOWING BUILDING, WALKS, ROADS AND WALLS, A PHOTOSTATIC PRINT OF THIS PLAN, REDUCED AS NECESSARY AND LEGIBLE IN ALL DETAILS, SHALL BE MADE TO A SIZE THAT WILL FIT INTO THE CONTROLLER COVER. THIS PRINT SHALL BE APPROVED BY THE ARCHITECT AND SHALL BE HERMETICALLY SEALED BY PLASTIC. THIS SHALL THEN BE SECURED TO THE INSIDE OF THE COVER.
5. IMMEDIATELY UPON INSTALLATION OF ANY BURIED PIPE OR EQUIPMENT, THE CONTRACTOR SHALL INDICATE ON THE DRAWINGS THE LOCATIONS OF SAID EQUIPMENT. DIMENSIONS SHALL BE GIVEN FROM PERMANENT OBJECTS SUCH AS BUILDINGS, SIDEWALKS, CURBS AND DRIVEWAYS.
1.08 GENERAL REQUIREMENTS:
A. CODE REQUIREMENTS SHALL BE THOSE OF STATE AND MUNICIPAL CODES AND REGULATIONS LOCALLY GOVERNING THIS WORK, PROVIDING THAT ANY REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, NOT CONFLICTING THEREWITH BUT EXCEEDING THE CODE REQUIREMENTS SHALL GOVERN, UNLESS WRITTEN PERMISSION TO THE CONTRARY IS GRANTED BY THE DISTRICT.
B. EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING IN THE AREA DUE TO EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES CAUSED BY HIS OPERATIONS.
C. CONNECTIONS SHALL BE MADE AT APPROXIMATELY THE LOCATIONS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS.
D. LANDSCAPE HEADERS AND MOWING STRIPS SHALL BE IN PLACE BEFORE INSTALLATION OF SPRINKLER SYSTEM.
E. SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS.
F. PLAN LOCATIONS OF HEADS, VALVES, CONTROLLER AND PIPE LINES ARE DIAGRAMMATIC AND INDICATE THE SPACING AND RELATIVE LOCATIONS OF ALL INSTALLATIONS.
G. ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF SIX (6) INCHES FROM EACH OTHER, AND FROM LINES OF OTHER TRADES. PARALLEL LINES SHALL NOT BE INSTALLED DIRECTLY OVER ONE ANOTHER.
H. DIELECTRIC BUSHINGS SHALL BE USED IN ANY CONNECTIONS WITH PIPING OF DISSIMILAR METAL MATERIALS.
I. POINT OF CONNECTION SHALL BE APPROXIMATELY AS SHOWN ON DRAWINGS. CONNECT NEW UNDERGROUND PIPING AND VALVES AND PROVIDE ALL FLANGES, ADAPTERS OR OTHER NECESSARY FITTINGS FOR CONNECTION.
J. PERMISSION TO SHUT OFF ANY EXISTING IN-USE WATER LINES MUST BE OBTAINED 48 HOURS IN ADVANCE, IN WRITING FROM THE OWNER. THE CONTRACTOR SHALL RECEIVE INSTRUCTIONS FROM THE OWNER, AS TO THE EXACT LENGTH OF TIME OF EACH SHUT-OFF.
K. CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL SITE CONDITIONS.

PART 2 - PRODUCTS
2.01 MATERIALS:
A. PIPING: PIPE SIZES SHOWN ARE NOMINAL INSIDE DIAMETER UNLESS OTHERWISE NOTED.
1. PVC PRESSURE MAINLINE PIPE FITTINGS: ALL BURIED PRIVATE PIPING IN THE RECLAIMED WATER SYSTEM SHALL BE INSTALLED WITH WARNING TAPE IDENTIFYING IT AS RECLAIMED WATER WITH THE EXCEPTION OF INTERMITTENT PRESSURE LINES. INTERMITTENT PRESSURE LINES (LINES ON THE DOWNSTREAM SIDE OF A CONTROLLER VALVE THAT WILL NOT BE SUBJECT TO CONSTANT PRESSURE) MAY BE EXCEPTED AS LONG AS IT IS APPARENT, DUE TO LINE SIZE AND LOCATION AS DETERMINED SOLELY BY THE DISTRICT ENGINEER OR INSPECTOR, THAT THE LINES ARE PART OF A RECLAIMED WATER SPRINKLER IRRIGATION SYSTEM. STENCILED PIPE, AS SPECIFIED BELOW, WILL BE ACCEPTED IN CONJUNCTION WITH WARNING TAPE.
(A) PRESSURE MAINLINE PIPING FOR SIZES 2"AND LARGER SHALL BE PVC CLASS 315, AND SHALL BE PURPLE.
(B) PIPE SHALL BE MADE FROM AN NSF APPROVED TYPE 1, GRADE 1, PVC COMPOUND CONFORMING TO ASTM RESIN SPECIFICATIONS "D1784". ALL PIPE MUST MEET REQUIREMENTS AS SET FORTH IN FEDERAL SPECIFICATIONS PS-22-70, WITH AN APPROPRIATE STANDARD DIMENSION (S.D.R.) - (SOLVENT WELD PIPE). (C) PRESSURE MAINLINE PIPING FOR SIZES 1-1/2" AND SMALLER SHALL BE PVC SCHEDULE 40 WITH SOLVENT WELDED JOINTS, AND SHALL BE PURPLE.
(D) PIPE SHALL BE MADE FROM NSF APPROVED TYPE 1, GRADE 1, PVC COMPOUND CONFORMING TO THE ASTM RESIN SPECIFICATIONS "D1785". ALL PIPE MUST MEET REQUIREMENTS AS SET FORTH IN FEDERAL SPECIFICATIONS PS-21-70. (E) PVC SOLVENT-WELD FITTINGS SHALL BE SCHEDULE 40, 1-2, 11-1 NSF APPROVED CONFORMING TO ASTM TEST PROCEDURE D2466.
(F) SOLVENT CEMENT AND PRIMER FOR PVC SOLVENT WELD PIPE AND FITTINGS SHALL WELD-ON' P-70 PRIMER & 711 MEDIUM SET GRAY CEMENT, OR APPROVED SUBSTITUTION.
(G) ALL PVC PIPE MUST BEAR THE FOLLOWING MARKINGS.
1. MANUFACTURER'S NAME
2. NOMINAL PIPE SIZE
3. SCHEDULE OR CLASS
4. PRESSURE RATING IN P.S.I.
5. NSF (NATIONAL SANITATION FOUNDATION) APPROVAL
6. DATE OF EXTRUSION
(H) ALL FITTINGS SHALL BEAR THE MANUFACTURER'S NAME OF TRADEMARK, MATERIAL DESIGNATION, SIZE, APPLICABLE I.P.S. SCHEDULE AND NSF SEAL OF APPROVAL. A.C.P., 4" AND ABOVE, SHALL HAVE THE WORDS "RECLAIMED WATER" STENCILED IN 2-INCH GREEN LETTERS ON BOTH SIDES OF THE PIPE IN AT LEAST THREE PLACES IN A 13-FOOT SECTION OF PIPE (TOTAL OF SIX PLACES PER SECTION OF PIPE). ALL PIPE SHALL HAVE STENCILING APPEARING ON BOTH SIDES OF THE PIPE WITH THE MARKING "RECLAIMED WATER" IN 5/8" LETTERS REPEATED EVERY 12 INCHES.
2. PVC NON-PRESSURE LATERAL LINE PIPING
(A) NON-PRESSURE BURIED LATERAL LINE PIPING SHALL BE PVC SCHEDULE 40 WITH SOLVENT-WELD JOINTS, AND SHALL BE PURPLE.
(B) PIPE SHALL BE MADE FROM NSF APPROVED, TYPE 1, GRADE 11 PVC COMPOUND CONFORMING TO ASTM SPECIFICATIONS "D1784". ALL PIPE MUST MEET REQUIREMENTS SET FORTH IN FEDERAL SPECIFICATION PS-22-70 WITH AN APPROPRIATE STANDARD DIMENSION RATIO.
(C) EXCEPT AS NOTED IN PARAGRAPHS (A) AND (B) OF SECTION 2.01.A.1(A) AND (B), ALL REQUIREMENTS FOR NON-PRESSURE LATERAL LINE PIPE AND FITTINGS SHALL BE THE SAME AS FOR SOLVENT-WELD PRESSURE MAINLINE PIPE AND FITTINGS AS SET FORTH IN SECTION 2.01.A.1 OF THESE SPECIFICATIONS, (PRIMER NOT REQUIRED). ALL UNSIZED END RUN LATER LINES SHALL BE $\frac{3}{4}$" PIPE.
3. BRASS PIPE SHALL BE IPS STANDARD WEIGHT 125 POUNDS, 85% RED BRASS.
B. FITTINGS AND CONNECTIONS:
1. POLYVINYL CHLORIDE PIPE FITTINGS AND CONNECTIONS: TYPE II, GRADE 1, SCHEDULE 40, HIGH IMPACT MOLDED FITTINGS, MANUFACTURED FROM VIRGIN COMPOUNDS AS SPECIFIED FOR PIPING, TAPERED SOCKET OR MOLDED THREAD TYPE, SUITABLE FOR EITHER SOLVENT WELD OR SCREWED CONNECTIONS. MACHINE THREADED FITTINGS AND PLASTIC SADDLE AND FLANGE FITTINGS ARE NOT ACCEPTABLE. FURNISH FITTINGS PERMANENTLY MARKED WITH FOLLOWING INFORMATION: NOMINAL PIPE SIZE, TYPE AND SCHEDULE OF MATERIAL, AND NATIONAL SANITATION FOUNDATION (NSF) SEAL OF APPROVAL. PVC FITTING SHALL CONFORM TO ASTM D2464 AND D2466.
2. BRASS PIPE FITTINGS AND CONNECTIONS: STANDARD 125 POUND CLASS 85% RED BRASS FITTINGS AND CONNECTIONS.
C. AUTOMATIC CONTROL WIRE:
1. ELECTRIC WIRING RUNNING FROM CONTROLLER TO THE AUTOMATIC CONTROL VALVES SHALL BE NO. 14, SOLID, SINGLE CONDUCTOR, COPPER WIRE, 4/64 INCH INSULATION, 4/64 INCH NEOPRENE JACKET, STYLE BR (DIRECT BURIAL) OR EQUAL, COLOR CODE WIRES TO EACH VALVE, COMMON WIRE SHALL BE WHITE.
D. AUTOMATIC CONTROLLER:
1. CONTROLLER SHALL BE PROTECTED IN PLACE.
E. CONTROL VALVES:
1. REMOTE CONTROL VALVES SHALL BE OF ALL PLASTIC BODY. VALVE SHALL BE PROVIDED WITH AN ADJUSTABLE FLOW CONTROL STEM AND SHALL BE OPERABLE MANUALLY WITHOUT ELECTRICITY.
F. VALVE BOX:
1. FOR REMOTE CONTROL VALVES 9-1/2" X 16" X 11" RECTANGULAR BOX MANUFACTURED BY CARSON INDUSTRIES #14129-12B WITH PURPLE BOLT DOWN COVER OR APPROVED EQUAL.
2. FOR BALL VALVE: 10" X 10'1/4" ROUND, CARSON INDUSTRIES #910-12B WITH PURPLE BOLT COVER OR APPROVED EQUAL. EXTENSION SLEEVE TO BE PVC-6" MINIMUM SIZE.
G. ANTI-DRAIN EXCESS FLOW VALVES:
1. ANTI-DRAIN EXCESS FLOW VALVES SHALL BE MAINTENANCE FREE AND CONSTRUCTED OF HEAVY DUTY TYPE I PVC WITH STAINLESS STEEL AND NEOPRENE INTERNAL PARTS. VALVES SHALL BE ADJUSTABLE FROM 5 FEET TO 40 FEET OF HEAD AND SHALL PREVENT ALL LOW HEAD DRAINAGE QUICKLY AND POSITIVELY AFTER RVC SHUT-OFF. VALVES SHALL HAVE A FEMALE IPS THREADED INLET AND OUTLET AND BE OF THE SAME SIZE AS THE RISER. THE ANTI-DRAIN VALVES SHALL BE VALCON #ADV- X.S. OR APPROVED EQUAL.
H. SPRINKLER HEADS SHALL BE AS REQUIRED ON THE DRAWINGS OR APPROVED EQUAL.
I. QUICK COUPLER ASSEMBLY:
1. NON-POTABLE QUICK COUPLER VALVE:
(A) QUICK COUPLER VALVE SHALL BE 1" SIZE: LOCKING CAP, RUBBER COVER WITH NON-POTABLE WARNING LABEL WITH ACME THREAD TYPE.
(B) QUICK COUPLER KEY SHALL BE OF BRASS/BRONZE WITH A HOSE BIB ASSEMBLY.
J. CHECK VALVES SHALL BE OF BRASS OR BRONZE, VERTICAL SPRING-LOADED AND SWING CHECK.
K. BALL VALVES:
1. PRODUCT: 1" - 2" SIZE (KING BROS. LO-TORQUE BALL VALVE MODELS LT. 1000-T THRU LT.2000-T) 2" - 4" SIZE (KING BROS. BLOCK TRUE UNION BALL VALVE MODELS VALENCIA, CALIFORNIA, 91384 PHONE: (800)541-2672 OR (805)257-3262.
L. CONCRETE FOOTINGS SHALL BE 2,000 PSI CONCRETE AT 28 DAYS.
M. BACKFILL SHALL BE CLEAN FILL SOIL.
N. CONTRACTOR SHALL PROVIDE TO THE OWNER:
1. TWO (2) CONTROL VALVE KEYS.
2. TWO (2) WRENCHES FOR REMOVING EACH DIFFERENT TYPE OF SPRINKLER HEAD.
3. ONE (1) 48" TEE WRENCH FOR OPERATING GATE VALVES.
4. SIX (6) QUICK COUPLER KEYS AND SIX (6) HOSE BIB ASSEMBLIES.
PART 3 - EXECUTION 3.01 GENERAL REQUIREMENTS:
A. LOCATIONS ON DRAWINGS ARE DIAGRAMMATIC AND APPROXIMATE ONLY, AND SHALL BE CHANGED AND ADJUSTED AS NECESSARY AS DIRECTED TO MEET EXISTING CONDITIONS AND OBTAIN COMPLETE WATER COVERAGE. LOCATE AND STAKE ALL WORK AND OBTAIN APPROVAL OF THE ARCHITECT BEFORE INSTALLATIONS.
B. INSTALL AND EXTEND SYSTEM AS SHOWN ON THE DRAWINGS, AND AS NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
C. LOCATE LINES, VALVES AND OTHER UNDERGROUND UTILITIES AND RECEIVE THE APPROVAL OF THE ARCHITECT BEFORE DIGGING TRENCHES.
3.02 INSTALLATION OF IRRIGATION SYSTEM:
A. EXCAVATION AND BACKFILLING OF TRENCHES:
1. EXCAVATE TRENCHES, PREPARE SUBGRADE, AND BACKFILL TO LINE AND GRADE WITH SUFFICIENT ROOM FOR PIPE FITTINGS, TESTING AND INSPECTING OPERATIONS. DO NOT BACKFILL UNTIL THE PIPE SYSTEM HAS BEEN SUBJECTED TO A HYDROSTATIC TEST AS SPECIFIED.
2. DEPTH OF TRENCH: POLYVINYL CHLORIDE PRESSURE LINE 30" MINIMUM (3 IN. OR LARGER) POLYVINYL CHLORIDE PRESSURE LINE 18" MINIMUM (2 1/2 IN. AND SMALLER) POLYVINYL CHLORIDE NON-PRESSURE LINE 12" MINIMUM
3. TRENCHING THROUGH AREAS WHERE TOPSOIL HAS BEEN SPREAD:
(A) DEPOSIT TOPSOIL ON ONE SIDE OF TRENCH AND SUBSOIL ON OPPOSITE SIDE.
4. SUBSOIL SHALL BE FREE OF ALL ROCKS OVER ONE (1) INCH IN DIAMETER, DEBRIS, AND LITTER, PRIOR TO USE AS BACKFILL WHERE SO INDICATED ON DETAIL.
5. REPAIR ANY LEAKS AND REPLACE ALL DEFECTIVE PIPE FITTINGS UNTIL LINES MEET TEST REQUIREMENTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN INSPECTED AND APPROVED FOR TIGHTNESS, QUALITY OF WORKMANSHIP AND MATERIALS.
6. BACKFILL TRENCHES, AFTER APPROVAL OF PIPING, WITH SUITABLE AND APPROVED MATERIAL, TAMPING SOIL AROUND PIPE AND THOROUGHLY COMPACTING ALL TRENCH FILLS UNTIL 90% COMPACTION HAS BEEN ACHEIVED.
7. BACKFILL MATERIAL SHALL BE AN APPROVED SOIL, FREE FROM ROCKS AND CLODS.
B. INSTALLATION OF POLYVINYL CHLORIDE PIPE:
1. BECAUSE OF THE NATURE OF PLASTIC PIPE AND FITTINGS, EXERCISE CAUTION IN HANDLING, LOADING AND STORING, TO AVOID DAMAGE.
2. THE PIPE AND FITTINGS SHALL BE STORED UNDER COVER UNTIL USING, AND SHALL BE TRANSPORTED IN A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE LENGTH OF PIPE TO LAY FLAT SO AS NOT TO BE SUBJECTED TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT.
3. ANY PIPE THAT HAS BEEN DENTED OR DAMAGED SHALL BE DISCARDED UNTIL SUCH DENTED OR DAMAGED SECTION IS CUT AND REJOINED WITH A COUPLING.
4. TRENCH DEPTH SHALL BE AS SPECIFIED ABOVE FROM THE FINISH GRADE TO THE TOP OF THE PIPE. THE BOTTOM OF THE TRENCH SHALL BE FREE OF ROCKS, CLODS, AND OTHER SHARP-EDGED OBJECTS.
5. PIPE ENDS AND FITTINGS SHALL BE WIPED WITH MEK, OR EQUAL, BEFORE WELDING SOLVENT IS APPLIED. WELDED JOINTS SHALL BE GIVEN A MINIMUM OF 15 MINUTES TO SET BEFORE MOVING OR HANDLING. ALL FIELD CUTS SHALL BE BEVELED TO REMOVE BURRS AND EXCESS BEFORE FITTING AND GLUING TOGETHER.
6. PIPE SHALL BE SNAKED FROM SIDE-TO-SIDE OF TRENCH BOTTOM TO ALLOW FOR EXPANSION AND CONTRACTION.
7. CENTER LOAD PIPE WITH SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING AND SLIPPING UNDER PRESSURE. LEAVE JOINTS EXPOSED FOR INSPECTION DURING TESTING.
8. NO WATER SHALL BE PERMITTED IN THE PIPE UNTIL INSPECTIONS HAVE BEEN COMPLETED AND A PERIOD OF AT LEAST 24 HOURS HAS ELAPSED FOR SOLVENT WELD SETTING AND CURING.
9. PLASTIC TO METAL JOINTS SHALL BE MADE WITH PLASTIC MALE ADAPTERS, METAL NIPPLE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH.
10. PLASTIC TO PLASTIC JOINTS: SOLVENT-WELD, USING SOLVENT RECOMMENDED BY PIPE MANUFACTURER ONLY.
11. SOLVENT-WELD JOINTS: ASSEMBLE PER MANUFACTURER'S RECOMMENDATION.
12. THRUST BLOCK SHALL BE INSTALLED AS PER CITY STANDARDS.
C. INSTALLATION OF BRASS PIPE:
1. CUT BRASS PIPING BY POWER HACKSAW, CIRCULAR CUTTING MACHINE USING AN ABRASIVE WHEEL, OR HAND HACKSAW. CUT NO PIPING WITH METALLIC WHEEL CUTTER OF ANY DESCRIPTION. REAM AND REMOVE ROUGH EDGES OR BURRS SMOOTH AND UNOBSTRUCTED FLOW IS OBTAINED.
2. CAREFULLY AND SMOOTHLY PLACE ON MALE THREAD ONLY. TIGHTEN SCREWED JOINTS WITH TONGS OR WRENCHES. CAULKING IS NOT PERMITTED.
D. REMOTE CONTROL WIRING:
1. DIRECT BURIAL CONTROL WIRE SIZES: AS SHOWN AND SPECIFIED HEREIN BEFORE.
2. PROVIDE ONE CONTROL WIRE AND ONE COMMON GROUND WIRE TO SERVICE EACH VALVE IN SYSTEM. PROVIDE 4-FOOT MINIMUM EXPANSION LOOP AT EACH VALVE TO PERMIT REMOVAL AND MAINTENANCE OF VALVES.
3. INSTALL CONTROL WIRES AND IRRIGATION PIPING IN COMMON TRENCHES WHEREVER POSSIBLE.
4. CONTROL WIRE SPLICES: ALLOW ONLY ON RUNS OF MORE THAN 300 FEET, SPLICES AS FOLLOWS:
(1) STRIP OFF MINIMUM OF 2-1/2 INCHES OF INSULATION FROM EACH WIRE.
(2) TWIST ON SCOTCHLOCK ELECTRICAL SPRING CONNECTOR, MINIMUM FOUR COMPLETE TURNS.
(3) SEAL CONNECTOR IN EPOXY RESIN.
(4) TAPE COMPLETED SPLICE WITH SCOTCH 33 ELECTRICAL TAPE.
5. NUMBERING AND TAGGING: IDENTIFY DIRECT BURIAL CONTROL WIRES FROM AUTOMATIC VALVES TO TERMINAL STRIPS OF CONTROLLER AT TERMINAL STRIP BY TAGGING WIRE WITH NUMBER OF CONNECTED VALVE.
E. REMOTE CONTROL VALVES:
1. INSTALL REMOTE CONTROL VALVES AS SHOWN ON DETAIL. INSTALL NO MORE THAN ONE VALVE PER BOX.
G. VALVE BOX:
1. INSTALL VALVE BOXES AS SHOWN ON DETAIL. INSTALL NO MORE THAN ONE VALVE PER BOX. STENCIL VALVE NUMBER AND CONTROLLER LETTER ON UNDERSIDE OF VALVE BOX LID.
H. SPRINKLER HEADS:
1. ALL SPRINKLER HEADS SHALL BE INSTALLED AS PER DETAILS SHOWN.
2. NOZZLE SIZE OF ALL HEADS SHALL BE ADJUSTED TO SUIT ANY PARTICULAR CONDITIONS OF THE AREA. THIS SHALL BE DONE AFTER THE SYSTEM HAS BEEN THOROUGHLY TESTED, IMMEDIATELY AFTER WRITTEN NOTIFICATION BY THE ARCHITECT TO DO SO.
I. QUICK COUPLER ASSEMBLY:
1. INSTALL ALL QUICK COUPLERS AS INDICATED ON DRAWINGS AND AS DIRECTED. SET ALL VALVES PLUMB AND TRUE TO FINISH GRADE AND A MAXIMUM OF 12 INCHES FROM PAVING, WALKS, HEADERS OR CURBS, AND AS SHOWN ON PLANS AND AS DIRECTED.
J. BALL VALVES:
1. INSTALL WHERE SHOWN AS DETAILED.
K. BACKFLOW PREVENTER:
1. BACKFLOW PREVENTER ASSEMBLY SHALL BE INSTALLED IN ACCORD WITH MANUFACTURER'S SPECIFICATIONS, LOCATED AND AS DIRECTED ON DRAWINGS, AND SHALL CONFORM TO ALL APPLICABLE CODE AND ORDINANCE REQUIREMENTS.
2. EXACT LOCATION AND POSITIONING SHALL BE VERIFIED ON THE SITE BY THE ARCHITECT.
L. PRESSURE REGULATOR SHALL BE INSTALLED AS PER DRAWINGS AND DETAIL. VERIFY FINAL LOCATION WITH ARCHITECT.
M. INSTALLATION OF ANTI-DRAIN VALVES: ANTI-DRAIN VALVES SHALL BE INSTALLED IN THE RISER ASSEMBLIES OF ALL SPRINKLER HEADS THAT DO NOT HAVE MANUFACTURER INSTALLED ANTI-DRAIN DEVICES
N. INSTALL QUICK COUPLERS AND REMOTE CONTROL VALVES ADJACENT TO WALKS AND CURBS IN SHRUB PLANTING AREAS. INSTALL QUICK COUPLES VALVES NO FURTHER AND 170' APART.
O. SLEEVING:
1. CROSSING OF ROADS WITH IRRIGATION PIPE OR WIRING SHALL BE AVOIDED WHEREVER POSSIBLE. IF A CROSSING MUST BE MADE, SCHEDULE 80 PVC SLEEVES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30" BELOW FINISH GRADE.
2. IRRIGATION LINES UNDER OTHER ASPHALT CONCRETE OR PORTLAND CONCRETE IMPROVEMENTS (OTHER THAN ROADS) SHALL BE INSTALLED IN SCHEDULE 40 PVC SLEEVES AT A MINIMUM DEPTH OF 18" BELOW FINISHED GRADE.
3. SLEEVE SIZES FOR IRRIGATION LINES SHALL BE A MINIMUM OF TWO (2) TIMES THE SIZE OF THE LINE IT SERVES.
4. CONTROLLER WIRES LOCATED UNDER STREETS OR OTHER PERMANENT IMPROVEMENTS SHALL BE INSTALLED IN SEPARATE PVC SLEEVES AND (CORRESPONDING TO TYPE AND DEPTH AS SPECIFIED IN O-1. AND O-2. ABOVE.
3.03 CLEAN-UP:
A. AS PROJECT PROGRESSES, CONTRACTOR SHALL MAINTAIN ALL AREAS IN A NEAT MANNER AND REMOVE UNSIGHTLY DEBRIS AS NECESSARY. AFTER COMPLETION OF THE PROJECT, CONTRACTOR SHALL REMOVE ALL DEBRIS AND CONTAINERS USED IN ACCOMPLISHING WORK. HE SHALL SWEEP AND CLEAN ALL SIDEWALKS, ASPHALT, AND CONCRETE AREAS ADJACENT TO THE PLANTINGS.
****

LICENSED LANDSCAPE ARCHITECT
Signature
Ren Date 9/30/18
Date 5/21/18
STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

L-15

SHEET 15 | CITY OF OCEANSIDE ENGINEERING DIVISION | 16 SHEETS

IRRIGATION SPECIFICATIONS
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK
JAMES P. BENEDETTI R.L.A. #3058
Checked By:
Approval Date:
PLAN NUMBER L18-00001

HYDROZONE PLAN

LEGEND

1 HYDROZONE ONE: DRIP (LOW WATER USE)
(12,923 SF, 34% OF TOTAL LANDSCAPE AREA)

2 HYDROZONE TWO: DRIP (MEDIUM WATER-USE)
(0 SF, 0% OF TOTAL LANDSCAPE AREA)

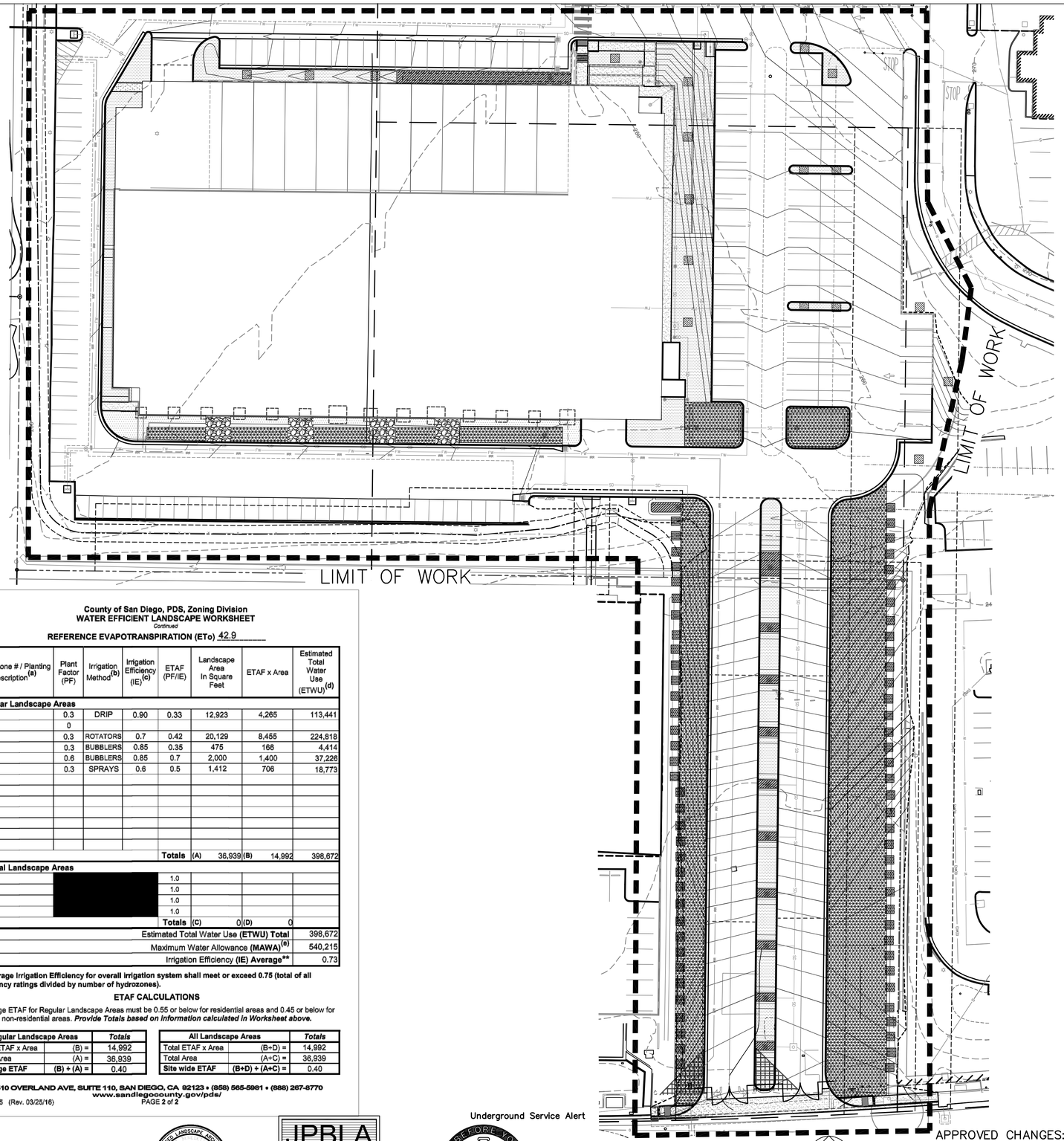
3 HYDROZONE THREE: MP ROTATOR (LOW-WATER USE)
(20,129 SF, 54% OF TOTAL LANDSCAPE AREA)

4 HYDROZONE FOUR: BUBBLERS (LOW-WATER USE)
(475 SF, 2% OF TOTAL LANDSCAPE AREA)

5 HYDROZONE FIVE: BUBBLERS (MEDIUM-WATER USE)
(2,000 SF, 6% OF TOTAL LANDSCAPE AREA)

6 HYDROZONE SIX: SPRAYS (LOW-WATER USE)
(1,412 SF, 4% OF TOTAL LANDSCAPE AREA)

TOTAL AREA 36939 SF



County of San Diego, Planning & Development Services

WATER EFFICIENT LANDSCAPE WORKSHEET

COUNTY LANDSCAPE ARCHITECT

The project applicant must fill out this worksheet as it is a required element of the Landscape Documentation Package. Complete all sections of the worksheet.

PROJECT INFORMATION

Project Applicant:	
Name of Project Applicant JIM BENEDETTI	*Phone No.* (760) 479-0644
Title LANDSCAPE ARCHITECT	*Email* JIM@JPBLA.COM
Company JPBLA,INC	*Fax No.* (760) 479-0645
Address (must include City, State and Zip Code) 4403 Manchester Ave #201, Encinitas, CA 92024	

Project:	
Project's Name TCMC PARKING STRUCTURE	
Assessor's Parcel No. 166-010-3100	*County Landscape Plan No.*
Address (must include City, State and Zip Code) 4002 Vista Way, Oceanside, CA 92056	

Use the information and formulas below to fill out the worksheet and calculations on page 2.

Hydrozone Category[a]	PF- Plant Factor
Very Low Water Use	0.0 - 0.1
Low Water Use*	0.2 - 0.3
Moderate Water Use	0.4 - 0.6
High Water Use	0.7 - 1.0

*Artificial turf and temporarily irrigated areas are considered Low Water Use.

Irrigation Method[b]	IE- Irrigation Efficiency[c]
Filler Pipe for Pools/Spas	1.00
Drip/Subsurface	0.90
Bubblers	0.85
Rotors	0.75
Rotators	0.70
Overhead Spray	0.80

ETWU[d] (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area

ETo - see Appendix A in Water Efficient Landscape Design Manual.
0.62 is the conversion factor to gallons per sq. ft.
ETAF is Plant Factor/Irrigation Efficiency.
Area is the Landscaped Area for each hydrozone.

MAWA[e] (Annual Gallons Allowed) =
(ETo)(0.62)[(ETAF x LA) + ((1- ETAF) x SLA)]

LA is the total landscape of all hydrozone areas in sq. ft.
SLA is the total special landscape area in square feet.
ETAF is 0.55 for residential areas
ETAF is 0.45 for non-residential areas.

County of San Diego, PDS, Zoning Division

WATER EFFICIENT LANDSCAPE WORKSHEET

Continued

REFERENCE EVAPOTRANSPIRATION (ETo) 42.9

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area In Square Feet	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
# 1	0.3	DRIP	0.90	0.33	12,923	4,265	113,441
# 2	0						
# 3	0.3	ROTATORS	0.7	0.42	20,129	8,455	224,818
# 4	0.3	BUBBLERS	0.85	0.35	475	166	4,414
# 5	0.6	BUBBLERS	0.85	0.7	2,000	1,400	37,226
# 6	0.3	SPRAYS	0.6	0.5	1,412	706	18,773
#							
#							
#							
#							
#							
#							
#							
				Totals	(A) 36,939	(B) 14,992	398,672
Special Landscape Areas							
#	[redacted]			1.0			
#				1.0			
#				1.0			
#				1.0			
				Totals	(C) 0	(D) 0	
					Estimated Total Water Use **(ETWU) Total**		398,672
					Maximum Water Allowance **(MAWA)**[e]		540,215
					Irrigation Efficiency **(IE) Average****		0.73

****Average Irrigation Efficiency for overall irrigation system shall meet or exceed 0.75 (total of all efficiency ratings divided by number of hydrozones).**

ETAF CALCULATIONS

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas and 0.45 or below for non-residential areas. ***Provide Totals based on information calculated in Worksheet above.***

Regular Landscape Areas		*Totals*
Total ETAF x Area	(B) =	14,992
Total Area	(A) =	36,939
Average ETAF	**(B) ÷ (A) =**	0.40

All Landscape Areas		*Totals*
Total ETAF x Area	(B+D) =	14,992
Total Area	(A+C) =	36,939
Site wide ETAF	**(B+D) ÷ (A+C) =**	0.40

LICENSED LANDSCAPE ARCHITECT — Signature — Ren Date — Date — STATE OF CALIFORNIA

JPBLA
JAMES P. BENEDETTI
LANDSCAPE ARCHITECT
4403 MANCHESTER AVE. STE. 201
ENCINITAS, CA 92024
760/479-0644 FAX 760/479-0645

Underground Service Alert
CALL BEFORE YOU DIG
CALL 811
TWO WORKING DAYS BEFORE YOU DIG

N

30 15 0 30 60 90
SCALE: 1"=30'-0"

APPROVED CHANGES:

NO.	DESCRIPTION	APPV'D	DATE

L-16

SHEET 16	CITY OF OCEANSIDE ENGINEERING DIVISION	16 SHEETS

LANDSCAPE WATER USE CALCULATIONS
TRI CITY MEDICAL CENTER

POINT OF CONTRACT – FOR CITY REFERENCE

LANDSCAPE ARCHITECT OF WORK	Checked By:	PLAN NUMBER
JAMES P. BENEDETTI R.L.A. #3058	Approval Date:	L18-00001

20180529 BIDSET